HEXAGON TRANSPORTATION CONSULTANTS, INC.

City of San José 2018 General Plan Amendments

Long Range Traffic Impact Analysis

Prepared for:

City of San José

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1. Introduction

In 2011, the City adopted the Envision San José 2040 General Plan (General Plan), which identified programmatic long-range transportation impacts based on planned land uses and the planned transportation system within the City projected to the Year 2035. The *Envision San José 2040: Transportation Impact Analysis (TIA) for the Draft Environmental Impact Report (DEIR)* provided a comprehensive evaluation of the effects of planned land use as identified in the General Plan on the citywide transportation system. The study commenced in 2008 with the data collection of the existing traffic volumes used to establish the existing transportation conditions for the analysis. The Envision San José 2040 General Plan DEIR included a robust discussion of how existing conditions were determined.[1]

The TIA for the Envision San José 2040 General Plan DEIR analyzed the impacts of the future planned growth and future conditions on the existing transportation system. The future conditions were modeled for build-out in horizon year 2035 and included planned land uses and land use intensities, as well as planned improvements to the transportation system within the City's boundaries and within the region.

In 2016, a subsequent TIA was prepared for the General Plan Four-Year Review that evaluated minor adjustments to planned job growth in the adopted General Plan and updated the projection of regional growth to the year 2040. The existing conditions for transportation were updated to reflect the actual development that occurred since the adoption of the General Plan and its base year of 2008 to the year 2015. The General Plan Four-Year Review TIA evaluated the effects of the updated existing conditions in 2015 plus future planned growth, and future conditions projected to the Year 2040, that established the baseline for the evaluation of transportation impacts of General Plan Amendments (GPA) considered for approval during and after the Four-Year Review.

In 2017, the BART Phase II EIR was published and included updated regional transportation projects based on 2015 existing roadway conditions. The City acquired this new model to use as the basis for the Downtown Strategy 2040 EIR and once again, the model was validated with current traffic data to update the existing transportation conditions.

This TIA report provides an evaluation of the changed circumstances of future conditions in the General Plan due to the proposed 2018 General Plan amendments using the updated model. The results of the analysis for the proposed land use adjustments are compared to the results of the General Plan Four-Year Review TIA evaluation of the General Plan through 2040 to determine if the proposed 2018 General Plan amendments would result in any new, or substantially more severe transportation impacts than those impacts that were already analyzed for the General Plan, as amended by the City Council in December 2017.

[1] City of San José. *Envision San José 2040 General Plan Draft Program Environmental Impact Report.* 2011. http://www.sanjoseca.gov/DocumentCenter/View/2190. Discussion starts on page 131 of this DEIR document.

After General Plan amendments to the Land Use/Transportation Diagram become effective, which is generally 30 days after Council approval, these General Plan amendments are incorporated into the updated General Plan Land Use/Transportation Diagram. This process may occur up to four times a year under State law. Therefore, the current General Plan includes all amendments that are currently effective.

The Envision San José 2040 General Plan Land Use / Transportation Diagram designates the type, intensity, and general distribution of planned land uses within San José. Because the 2018 General Plan amendments propose changes to sites' land use designations, this TIA evaluates the incremental changes from uses and intensities allowed under the sites' current land use designations to the uses and intensities allowed under the proposed General Plan land use designations for each site. The reason the baseline of the current land use designation is used (as opposed to the existing physical condition) is because the General Plan DEIR and subsequent reviews have already evaluated the potential transportation CEQA impacts of building out the General Plan using existing physical condition baseline in 2008, as explained in detail above. The existing physical condition baseline was reviewed, analyzed, and updated again in 2016, 2017, and as part of this TIA, and it was determined based on substantial evidence that the proposed 2018 General Plan amendments would not result in any new, or substantially more severe transportation impacts than those impacts that were already analyzed for the General Plan, as updated.

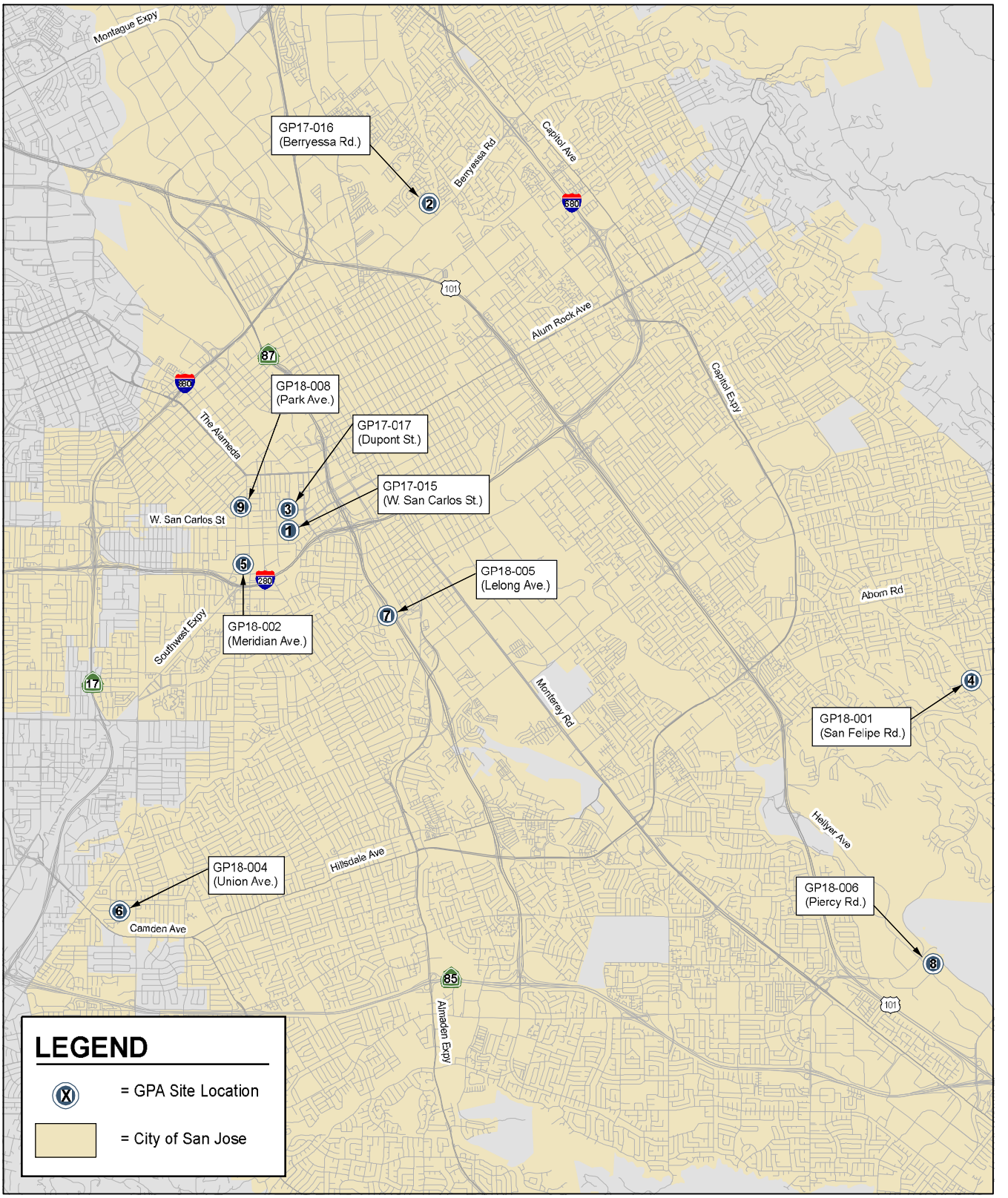
Further, the Build-out of the General Plan and related environmental analysis under CEQA assumes development overall in the City will occur at the middle range of the General Plan land use designations or consistent with surrounding development intensities. The reason why the middle or typical range is used as opposed to the maximum intensities potentially allowed under various General Plan land use designations is because building out under the maximum intensities for all General Plan land designation would exceed the total planned growth capacity allocated in the General Plan, and this maximum amount of build-out does not represent typical development patterns or the average amount of development built on each site. General Plan land use designations allow a wide range of development intensities and types of land uses to accommodate growth; however, development projects are not typically proposed at the maximum densities due to existing development patterns, site and parking constraints, Federal Aviation Administration regulations, maximum allowable height provisions and other development regulations in the San José Municipal Code in Title 20 (Zoning), market conditions, and other factors.

For example, several General Plan land use designations include a maximum intensity for each use allowed under a land use designation, and also allow a mix of land uses. On a site where development is mixed-use, or there is a height limit, or there is a minimum required setback, achieving the maximum allowable intensities for each land use in the development is often physically infeasible. To evaluate the incremental changes of the proposed General Plan land use amendments, average residential and commercial densities for development under these land use designations and in the planning areas of the proposed General Plan amendments for San José are assumed for the current and proposed land use designations on each site. Individual development projects would be required to complete a near term traffic analysis in conjunction with any future development permit applications.

Proposed 2018 GPA Site Descriptions

The project consists of amending the current adopted land use designations of the Envision San José 2040 General Plan (GP) for nine sites within the City of San José (see Figure 1) as well as the land use amendments associated with the proposed Downtown Strategy 2040 (DTS 2040). In addition to the proposed land use amendments at the nine GP sites, City staff recommended alternatives (referred hereafter as the Staff Alternative) at two of the nine sites were also evaluated. The GPA sites, described in detailed in the following chapter, include the following:

Figure 1
Proposed GPA Site Locations



Site 1 – GP17-015 (West San Carlos Street)
Site 2 – GP17-016 (Berryessa Road)
Site 3 – GP17-017 (Dupont Street)
Site 4 – GP18-001 (San Felipe Road)
Site 5 – GP18-002 (Meridian Avenue); includes Staff Alternative
Site 6 – GP18-004 (Union Avenue); includes Staff Alternative
Site 7 – GP18-005 (Lelong Street)
Site 8 – GP18-006 (Piercy Road)
Site 9 – GP18-008 (Park Avenue)

Downtown Strategy 2040 (DTS 2040) Amendment

The Downtown Strategy 2000 EIR evaluated the traffic generated by overall Downtown development with a horizon Year of 2020. The Downtown Strategy 2000 was incorporated into the current Envision San José 2040 GP that was adopted in November 2011.

The DTS 2040 proposes to increase the allowed number of households and jobs within the Downtown Growth Boundary (DGB) by 2040, when compared to the Envision San José 2040 GP. However, the proposed increases in residential units and employment space will not result in an increase in the overall citywide number of residential units and jobs envisioned in the GP.

Each of the proposed land use amendments and resulting changes in households, employment for each of the proposed GPA sites are described in detail within the following chapters.

GPA Analysis Exemption

The City of San José Travel Demand Forecasting (TDF) model, which is described in detail in Chapter 3, was developed to help the City project peak hour traffic impacts attributable to proposed amendments to the City's General Plan. The model is used to estimate the net change in peak-hour trips that are attributable to a proposed amendment. The City has established minimum peak-hour trip thresholds for GP land use amendments that require a site-specific GPA analysis. It is presumed that amendments that result in trips less than the trip thresholds would not create significant long-term impacts by themselves. The City's trip thresholds for requiring a site-specific GPA traffic analysis are presented in the City of San José *Transportation Analysis Handbook*, April 2018 and are shown in Table 1 below. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 peak-hour trips to be generated by the subject site would be required to prepare a site-specific GPA traffic analysis.

Seven of the nine subject GPA sites are located outside the specific subareas, and therefore are subject to the 250 PM peak-hour trip threshold. The proposed land use amendments on three of the of seven amendment sites located outside of the specific subareas would result in a net increase of more than 250 peak-hour trips (See Table 3) and require a site-specific GPA traffic analysis. Additionally, the Staff Alternative would result in a net increase of more than 250 peak-hour trips at both of the GP sites with staff proposed amendments. The DTS 2040 amendment proposes to reallocate a substantial number of households and employment from other areas in the City to the Downtown area and would result in an increase of more than 250 peak-hour trips in the Downtown area. Therefore, the DTS 2040 amendment also will be required to prepare a site-specific GPA traffic analysis. The following GPA sites require a site-specific GPA traffic analysis:

Table 1
Site-Specific Long-Range Transportation Analysis Screening Criteria for Land Use Amendments

Location of Amendment	Maximum Allowable PM Peak Hour Vehicle-Trips			
	Expansion of Residential Use[1]	Conversion from Residential to Non-Residential Use[2]	Conversion from Non-Residential to Residential Use[2]	Expansion of Non-Residential Use[1]
North San Jose	1,000	0	500	50
Evergreen	15	600	0	300
South San Jose	50	600	0	300
Remainder of City	250	250	250	250

Notes:
[1] The screening criteria for a proposed expansion of the same land use are measured in net new PM peak hour vehicle trips.
[2] The screening criteria for a proposed land use conversion are measured in total PM peak hour vehicle-trips generated by the proposed use.
Source: City of San Jose *Transportation Analysis Handbook*, April 2018.

- GP17-016 (Berryessa Road)
- GP18-002 (Meridian Avenue)
- GP18-002 (Meridian Avenue) – Staff Alternative
- GP 18-004 (Union Avenue) – Staff Alternative
- GP18-005 (Lelong Street)
- Downtown Strategy 2040 Area

The remaining two GPA sites are located within the Evergreen subarea (Sites 4 and 8) and have a trip threshold of 600 and 300 PM peak-hour trips, respectively. The proposed land use amendments on each of the sites located within the Evergreen sub-area would result in net increase in peak hour trips of less than the established trip threshold and do not require a site-specific GPA traffic analysis.

Scope of Study

The purpose of the GPAs traffic analysis is to assess the long-range impacts of the amendments on the citywide transportation system. This study includes an evaluation of the cumulative impacts of all nine GPA sites under both the applicant proposed GPAs and Staff Alternatives and DTS 2040 amendments. The study also provides the required site-specific GPA traffic analysis for the four identified GPA sites and the DTS 2040 amendments. Individual development projects also will be required to complete a near term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP. The potential traffic impacts of the project were evaluated in accordance with the guidelines set forth by the City of San José for GPA traffic analysis.

The project consists of land use changes to the current GP land uses. The project does not propose any changes to the citywide transportation system. The GPA long-range analysis focuses on the

potential changes on the citywide transportation system in the horizon year of the GP (2040) when the GP capacities for housing and jobs are fully developed. The analysis includes evaluation of increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, impacts to pedestrian, bicycle, and transit facilities, and impacts to roadways in adjacent jurisdictions. Impacts are evaluated based on the same Measures of Effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA. Traffic conditions were evaluated for the following traffic scenarios using the City's TDF model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses (i.e., including the adopted GP Four-Year Review Land Use adjustments) is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the citywide roadway network to reflect the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Applicant Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendments at all nine proposed GPA sites and the DTS 2040 amendments. Transportation conditions for the Proposed 2040 GPA conditions were evaluated relative to the Current 2040 GP Conditions to determine any long-range traffic impacts.
- **Staff Alternative 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendments at seven proposed GPA sites, Staff Alternative proposed land use and density at two proposed GPA sites (GP18-002 and GP18-004), and the DTS 2040 amendment. Transportation conditions for the Staff Alternative 2040 GPA conditions were evaluated relative to the Current 2040 GP Conditions to determine any long-range traffic impacts.

Report Organization

The remainder of this report is divided into the following chapters; Chapter 2 presents a detailed description of each of the proposed GPA sites included in the analysis. Chapter 3 describes analysis methodology, including the City's TDF model, and the measures of effectiveness (MOEs) and significance thresholds used in the analysis. Chapter 4 presents the results of the cumulative analysis based on the TDF modeling and citywide MOEs for both the applicant proposed GPAs and the Staff Alternative. Chapters 5 through 9 present the site-specific analysis for the four GPA sites and the DTS 2040 amendment. Chapter 10 presents the conclusions of the long-range cumulative and site-specific GPA analyses.

2. General Plan Amendment Site Descriptions

The proposed project consists of amending land uses currently adopted in the Envision San José 2040 General Plan on nine sites and adjustment of the planned growth of the Downtown Strategy Plan. The amendment sites and proposed GPA alternatives are described in more detail below along with peak-hour trip generation estimates for each of the proposed sites.

Envision San José 2040 General Plan

The City of San José *Envision San José 2040 General Plan* was adopted in 2011 and was based on planned land uses within the City projected to the Year 2035. In October 2010, Fehr & Peers Transportation Consultants prepared a Traffic Impact Analysis, *Envision San José 2040: Transportation Impact Analysis (TIA) for the Draft Environmental Impact Report (DEIR)*. Subsequently, in March 2011, the City of San José prepared a technical memorandum (*Envision San José 2040 General Plan Project Scenario 7 and Land Use Options Scenario 7A)* that presented traffic analysis for the ultimate Envision San José 2040 GP land uses. The GP TIA and technical memorandum provide a comprehensive evaluation of the effects of planned land use as identified in the GP on the citywide transportation system.

In October 2016, Hexagon Transportation Consultants prepared a Traffic Impact Analysis for the City, General Plan *Four-Year Review: Transportation Impact Analysis (TIA)* that evaluated the effects of minor adjustments to the adopted 2040 GP planned growth that resulted in the reduction in the total planned employment within the City. The GP Four-Year Review traffic analysis included:

- Update of the City's projected land uses between 2008 and 2015 to reflect the actual development that has occurred in the period since the adoption of the GP and its base year of 2008.
- Projection of regional growth to the Year 2040 rather than the Year 2035 used in the Envision San José 2040 GP Environmental Impact Report (EIR). However, the projection to Year 2040 did not include any change to the land uses within the City of San José as adopted in the GP.
- Update of the citywide transportation system to reflect the City's current (2015) street and transit network as well as adjustments to the planned street and transit improvements that are expected to be constructed by 2040.
- Transportation impact analysis of the proposed GP Four-Year Review land use adjustments.
- Update of the horizon year of the planned land uses from Year 2035 to Year 2040.

The proposed planned growth analyzed in the General Plan Four-Year Review was ultimately adopted. Thus, the General Plan Four-Year Review traffic analysis provides a comprehensive evaluation of the effects of planned land use as identified in the current GP on the citywide transportation system and is used as the baseline from which impacts due to land use amendments such as the proposed project are evaluated.

Land use data consisting of households and employment growth for each of the proposed GPA sites as reflected in the adopted GP and the proposed land use amendments was prepared by Department of Planning, Building, and Code Enforcement and provided to Hexagon for use in this analysis.

Amendment Sites

The project includes nine proposed GPA sites: GP17-015, GP17-016, GP17-017, GP18-001, GP18-002, GP18-004, GP18-005, GP18-006, GP18-008. Each of the proposed GPAs would result in changes to the number of households and jobs on each site when compared to those adopted per the Envision San José 2040 GP for each site. However, the proposed GPAs will not change the total number of jobs and households citywide. The TDF model is used to rebalance the number of jobs and households citywide to maintain the General Plan Goal of 751,650 jobs and 429,350 households.

Table 2 summarizes the current 2040 GP and applicant and Staff Alternative proposed land uses and density for each site. Table 3 summarizes the changes in households and jobs for each site and the resulting increases in peak-hour trips. The peak-hour trips for each site were estimated using the City of San José's TDF model. The TDF modeling is described in Chapter 3.

Proposed land use changes for each of the GPA sites are described below.

- **Site 1 - GP17-015 (West San Carlos Street):** The 1.12-acre site is located on the north side of West San Carlos Street, between McEvoy Street and Dupont Street, and inside the Diridon Station Urban Village. Figure 2 shows the location of the site. The adopted GP land use designation for the site is *Mixed-Use Commercial*, and the proposed amendment involves changing the adopted land use to *Transit Residential.* The proposed amendment would result in 132 additional households on the site. Based on the TDF modeling results, the amendment would not result in an increase of vehicle trips on local streets near the GP17-015 site and would not be required to prepare a site-specific GPA traffic analysis.

  Site 2 - GP17-016 (Berryessa Road): The 13.02-acre site is located on the north side of Berryessa Road near the Berryessa BART Station/Berryessa Road intersection and west of the BART right-of-way. Figure 3 shows the location of the site. The adopted GP land use designation for the site is *Industrial Park*, and the proposed amendment involves changing the adopted land use to *Urban Village*. The proposed amendment would result in 1,627 additional households and 379 additional jobs on the site. Based on the TDF modeling results, the increase in households and jobs would result in an increase of greater than 250 peak-hour trips to the site. *Therefore, the preparation of a site-specific GPA traffic analysis for the proposed land use amendment on the GP17-016 site is required.*

- **Site 3 - GP17-017 (Dupont Street):** The 3.86-acre site is located near the McEvoy Street and Park Avenue intersection. Figure 4 shows the location of the site. The adopted GP land use designation for the site is *Mixed-Use Commercial* and the proposed amendment involves changing the adopted land use to *Transit Residential*. The proposed amendment would result in 483 additional households on the site. Based on the TDF modeling results, the amendment would not result in peak-hour trips generated by GP17-017 to exceed the 250-trip threshold and a site-specific GPA traffic analysis would not be required.

Table 2
Existing General Plan and Proposed GPA Land Uses

Site Number	Project Name	Location	APN	Size (ac.)	Existing General Plan		Proposed/*Staff* General Plan Amendment	
					Land Use	Density	Land Use	Density
1	GP17-015 (West San Carlos St.)	699 W. San Carlos Street; 254, 258 McEvoy Street; 277 Dupont Street	261-38-004; 005; 030; 047; 048; 049	1.12	Mixed Use Commercial	up to 50 DU/AC FAR 0.5 to 4.5	Transit Residential	50-250 DU/AC; FAR 2.0 to 12.0
2	GP17-016 (Berryessa Rd.)	1655 Berryessa Road	241-03-023; 024; 025	13.02	Industrial Park	FAR up to 10.0	Urban Village	up to 250 DU/AC; FAR up 10.0
3	GP17-017 (Dupont St.)	205, 214 Dupont Street; 275 McEvoy Street	261-38-057; 064; 065; 067; 261-39-035	3.86	Mixed Use Commercial	up to 50 DU/AC FAR 0.5 to 4.5	Transit Residential	50-250 DU/AC; FAR 2.0 to 12.0
4	GP18-001 (San Felipe Rd.)	4349 San Felipe Road	676-36-007	0.99	Rural Residential	2 DU/AC; FAR up to 0.35	Neighborhood/Community Commercial (0.19 acres), Rural Residential (0.37 acres), Open Space, Parklands and Habitat (0.43 acres)	FAR up to 3.5, 2 DU/AC; FAR up to 0.35
5	GP18-002 (Meridian Ave.)	550, 570 Meridian Avenue; 1401 Parkmoor Avenue; 529, 581, 691 Race Street	264-08-060; 061; 063; 066; 067; 071; 072; 077; 078	11.56	Industrial Park	FAR up to 10.0	Combined Industrial/Commercial	FAR up to 12.0
	GP18-002 (Meridian Ave.) ***Staff Alternative***	*456, 460, 550, 570 Meridian Avenue; 1401 Parkmoor Avenue; 529, 581, 691 Race Street*	*264-08-017; 060; 061; 063; 066; 067; 071; 072; 077; 078; 085*	*12.54*	*same*	*same*	*same*	*same*
6	GP18-004 (Union Avenue)	3235 Union Avenue; 2223 Camden Avenue	414-25-001; 020	12.12	Public/Quasi-Public	FAR N/A	Residential Neighborhood (6 acres), Combined Industrial/Commercial (3.28 acres)	8 DU/AC; FAR up to 0.7, FAR up to 12.0
	GP18-004 (Union Avenue) ***Staff Alternative***	*same*	*same*	*same*	*same*	*same*	*Combined Industrial/Commercial (9.28 acres)*	*FAR up to 12.0*
7	GP18-005 (Lelong Street)	Northwest quadrant of Lelong St/Alma Ave intersection	434-13-038	4.30	Public/Quasi-Public	FAR N/A	Urban Residential	30-95 DU/AC; FAR 1.0 to 4.0
8	GP18-006 (Piercy Rd.)	459, 469 Piercy Road	678-93-039; 040	5.62	Industrial Park	FAR up to 10.0	Combined Industrial/Commercial	FAR up to 12.0
9	GP18-008 (Park Ave.)	1131 Park Avenue; 15 Tillman Avenue	261-27-074; 261-12-071	0.24	Residential Neighborhood (0.13 acres), Neighborhood/Community Commercial (0.11 acres)	8 DU/AC; FAR up to 0.7, FAR up to 3.5	Residential Neighborhood (0.11 acres), Neighborhood/Community Commercial (0.13 acres)	8 DU/AC; FAR up to 0.7, FAR up to 3.5

Notes: FAR = floor-to-area ratio; DU = dwelling units; AC = acre; APN = assessor's parcel number; N/A = not applicable
Source: City of San Jose Planning Department (June 2018)

Table 3
Changes in Households, Jobs, and Peak-Hour Trips Due to Applicant Proposed GPAs and DTS 2040 Amendment

Site Number	Site Name	General Plan (Baseline) [1]		General Plan Amendment [2]		Net Land Use Change		Net Peak-Hour Trip Change	
		TOTHH	TEMP	TOTHH	TEMP	TOTHH	TEMP	AM	PM
1	GP-17-015 [West San Carlos Street]	18	337	150	337	132	0	0	0
2	GP-17-016 [Berryessa Road]	1,578	6,749	3,205	7,128	1,627	379	**1,059**	**1,301**
3	GP-17-017 [Dupont Street]	768	2,385	1,251	2,385	483	0	214	241
4	GP-18-001 [San Felipe Road]	423	235	423	244	0	9	6	9
5	GP-18-002 [Meridian Avenue]	1,656	2,811	1,656	2,414	0	-397	128	**260**
6	GP-18-004 [Union Avenue]	390	1,446	426	1,492	36	46	55	73
7	GP-18-005 [Lelong Street]	447	424	713	586	266	162	237	**300**
8	GP-18-006 [Piercy Road]	17	3,843	17	3,650	0	-193	25	112
9	GP-18-008 [Park Avenue]	517	420	517	421	0	1	-2	-3
	Downtown Strategy 2040 Plan	15,784	80,509	19,784	90,456	4,000	10,000	**3,287**	**4,568**

Notes: TOTHH = total number of households; TEMP = total number of jobs.
[1] Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP). The buildout of the 2040 GP represents baseline conditions.
[2] Total number of households and jobs as proposed by the applicant GP Amendments.
Outlined indicates GPA that results in an increase in peak hour trips greater than 250 trips and requires site-specific GPA traffic analysis.
Sources: City of San Jose Planning Department, June 2018
City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

- **Site 4 - GP18-001 (San Felipe Road):** The 0.99-acre site is located on the west side of San Felipe Road near its intersection with Paseo de Los Arboles, within the Evergreen Subarea. Figure 5 shows the location of the site. The adopted GP land use designation for the site are *Rural Residential* and *Open Space, Parklands, and Habitat*, and the proposed amendment involves changing the adopted land use to include *Neighborhood/Community Commercial* in addition to *Rural Residential* and *Open Space, Parklands, and Habitat*. The proposed amendment would result in 9 additional jobs on the site. Based on the TDF modeling results, the amendment would not substantially increase vehicle traffic on local streets near the GP18-001 site and would not be required to prepare a site-specific GPA traffic analysis.
- **Site 5 - GP18-002 (Meridian Avenue):** The 11.56-acre site is located on the north side of Parkmoor Avenue, between Meridian Avenue and Race Street. Figure 6 shows the location of the site. The adopted GP land use designation for the site is *Industrial Park*, and the proposed amendment involves changing the adopted land use to *Combined Industrial/Commercial*. The proposed amendment would result in 397 fewer jobs on the site. However, based on the TDF modeling results, the proposed land use amendment would result in an increase of greater than 250 peak-hour trips. Although commercial land uses generally have fewer jobs per 1,000 square feet of space when compared to industrial uses, commercial uses result in more trips than industrial land use due to patrons of the commercial uses. Thus, replacing some of the industrial land use with commercial land use may result in a reduction in jobs but still result in an increase in trips to the site. *Therefore, the preparation of a site-specific GPA traffic analysis for the proposed land use amendment on the GP18-002 site is required.*

- **Site 6 - GP18-004 (Union Avenue):** The 12.12-acre site is bounded by Camden Avenue and Union Avenue. Figure 7 shows the location of the site. The adopted GP land use designation for the site is *Public/Quasi-Public*, and the proposed amendment involves changing the adopted land use to *Residential Neighborhood* and *Combined Industrial/Commercial*. The proposed amendment would result in 36 additional households and 46 additional jobs on the site. Based on the TDF modeling results, the amendment would not result in peak-hour trips generated by GP18-004 to exceed the 250-trip threshold and a site-specific GPA traffic analysis would not be required.
- **Site 7 - GP18-005 (Lelong Street):** The 4.3-acre site is located at the northeast quadrant of the Lelong Street/Alma Avenue intersection. Figure 8 shows the location of the site. The adopted GP land use designation for the site is *Public/Quasi-Public* and the proposed amendment involves changing the adopted land use to *Urban Residential.* The proposed amendment would result in 266 additional households and 162 additional jobs on the site. Based on the TDF modeling results, the increase in households and jobs would result in an increase of greater than 250 peak-hour trips to the site. *Therefore, the preparation of a site-specific GPA traffic analysis for the proposed land use amendment on the GP18-005 site is required.*
- **Site 8 - GP18-006 (Piercy Road):** The 5.62-acre site is located on the northeast quadrant of the Hellyer Avenue/Piercy Road intersection, within the Evergreen Subarea. Figure 9 shows the location of the site. The adopted GP land use designation for the site is *Industrial Park*, and the proposed amendment involves changing the adopted land use to *Combined Industrial/Commercial*. The proposed amendment would result in 193 fewer jobs on the site. Based on the TDF modeling results, the amendment would not result in peak-hour trips generated by GP18-006 to exceed the PM peak-hour trip threshold for the site and a site-specific GPA traffic analysis would not be required.
- **Site 9 - GP18-008 (Park Avenue):** The 0.24-acre site is bounded by Park Avenue and Tillman Avenue. Figure 10 shows the location of the site. The adopted GP land use designation for the site is *Residential Neighborhood* and *Neighborhood/Community Commercial*, and the proposed amendment involves maintaining the adopted land uses but swapping the land use designations on the two parcels. The proposed amendment would result in one additional job on the site. Based on the TDF modeling results, the amendment would not result in an increase of vehicle trips on local streets near the GP18-008 site and would not be required to prepare a site-specific GPA traffic analysis.

Staff Alternative General Plan Amendment Descriptions

The staff proposed GPA alternative consists of the same nine GPA sites, however, two of the sites (GP18-002 and GP18-004) would consist of City staff proposed alternative land use scenarios. The alternatives are intended to allow decision makers to consider other land use designation options consistent with General Plan goals and policies for sites GP18-002 and GP18-004. Table 4 summarizes the proposed land use and density under the Staff Alternative for these two sites as well as the projected change in households, jobs, and peak-hour trips. The remaining seven sites would consist of the applicant proposed amendments, as described previously. The Staff Alternative GPAs are described below.

- **Site 5 - GP18-002 (Meridian Avenue) Staff Alternative:** Under the Staff Alternative, the proposed amendment would involve changing the adopted land use designation from *Industrial Park* to *Combined Industrial/Commercial* (same as the applicant proposed GPA) in addition to including two additional parcels to increase the size of the site from 11.56 acres to 12.54 acres. The Staff Alternative would result in 432 fewer jobs on the site. However, based on the TDF

Table 4
Changes in Households, Jobs, and Peak-Hour Trips Due to Staff Alternative GPAs

Site Number	Site Name	General Plan (Baseline) [1]		General Plan Amendment [2]		Net Land Use Change		Net Peak-Hour Trip Change	
		TOTHH	TEMP	TOTHH	TEMP	TOTHH	TEMP	AM	PM
5	GP-18-002 [Meridian Avenue]	1,656	2,811	1,656	2,379	0	-432	140	**284**
6	GP-18-004 [Union Avenue]	390	1,446	390	1,904	0	458	**289**	**449**

Notes: TOTHH = total number of households; TEMP = total number of jobs.
[1] Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP). The buildout of the 2040 GP represents baseline conditions.
[2] Total number of households and jobs as proposed by the Staff Alterntive GP Amendments.
Outlined indicates GPA that results in an increase in peak hour trips greater than 250 trips and requires site-specific GPA traffic analysis.
Sources: City of San Jose Planning Department, June 2018
City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

modeling results, the Staff Alternative would result in an increase of greater than 250 peak hour trips. Although commercial land uses generally have fewer jobs per 1,000 square feet of space when compared to industrial uses, commercial uses result in more trips than industrial land use due to patrons of the commercial uses. Thus, replacing some of the industrial land use with commercial land use may result in a reduction in jobs but still result in an increase in trips to the site. *Therefore, a site-specific GPA traffic analysis is required.*

- **Site 6 - GP18-004 (Union Avenue) Staff Alternative:** Under the Staff Alternative, the amendment proposes changing the adopted land use designation from *Public/Quasi-Public* to *Combined Industrial/Commercial*. The Staff Alternative would result in 458 additional jobs and as a result, an increase of greater than 250 peak-hour trips. *Therefore, a site-specific GPA traffic analysis is required.*

Downtown Strategy 2040 Amendment

The Downtown Strategy 2040 amendment would increase the Downtown by 4,000 households and 10,000 jobs transferred from other areas within the City. Although the Downtown Strategy 2040 would not change the total number of jobs and households citywide, the household and job increase within the Downtown area would substantially increase vehicle traffic on local streets within and adjacent to the Downtown area. Therefore, the Downtown Strategy 2040 amendment will be required to prepare a site-specific GPA traffic analysis. The Downtown Strategy 2040 amendment is assumed under both the applicant proposed and Staff Alternative GPAs.

Table 3 summarizes the changes in households and jobs associated with the Downtown Strategy 2040 amendment and the resulting increases in peak-hour trips.

Figure 2
Location of GPA Site 1: GP17-015 (West San Carlos Street)

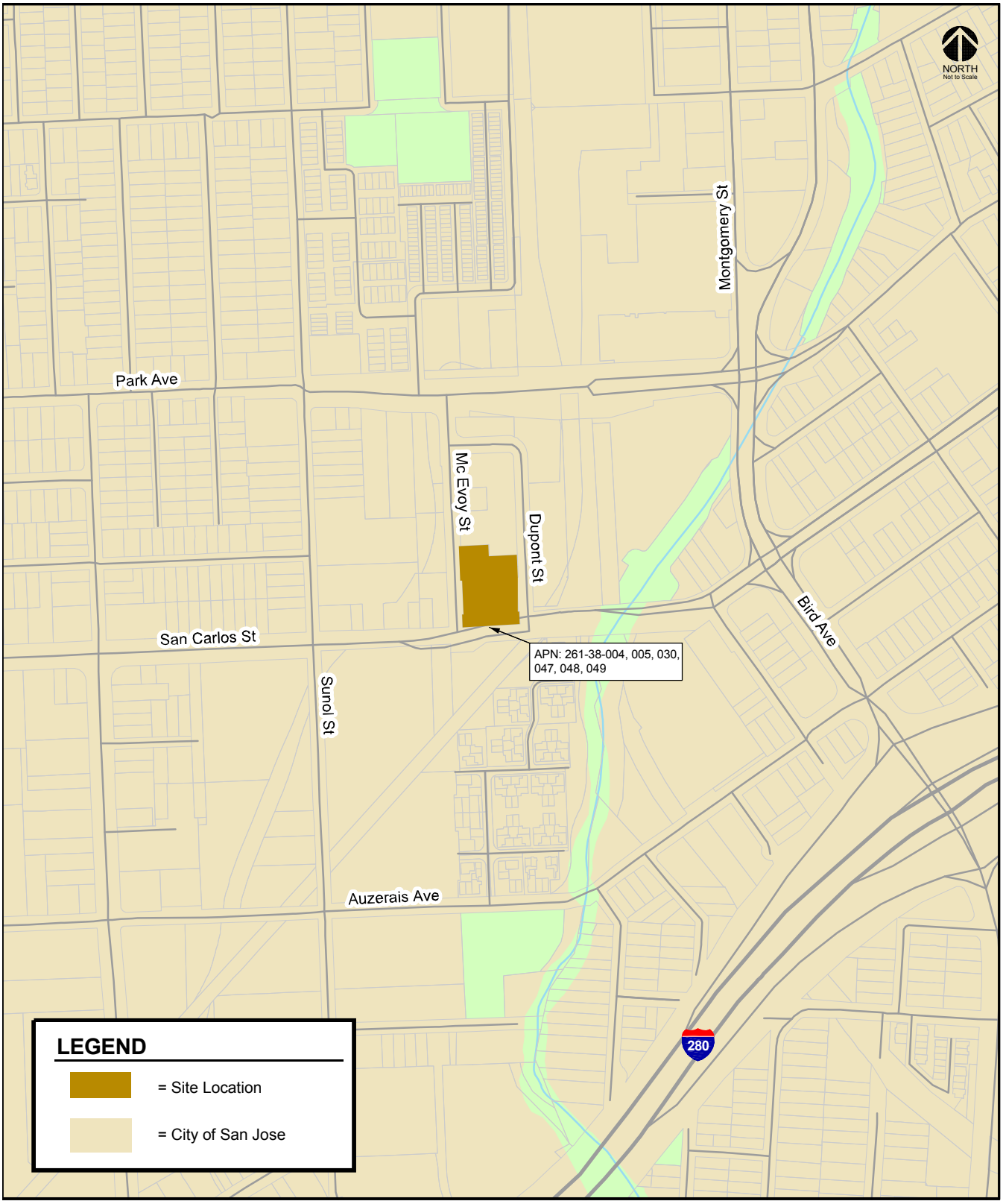


Figure 3
Location of GPA Site 2: GP17-016 (Berryessa Road)

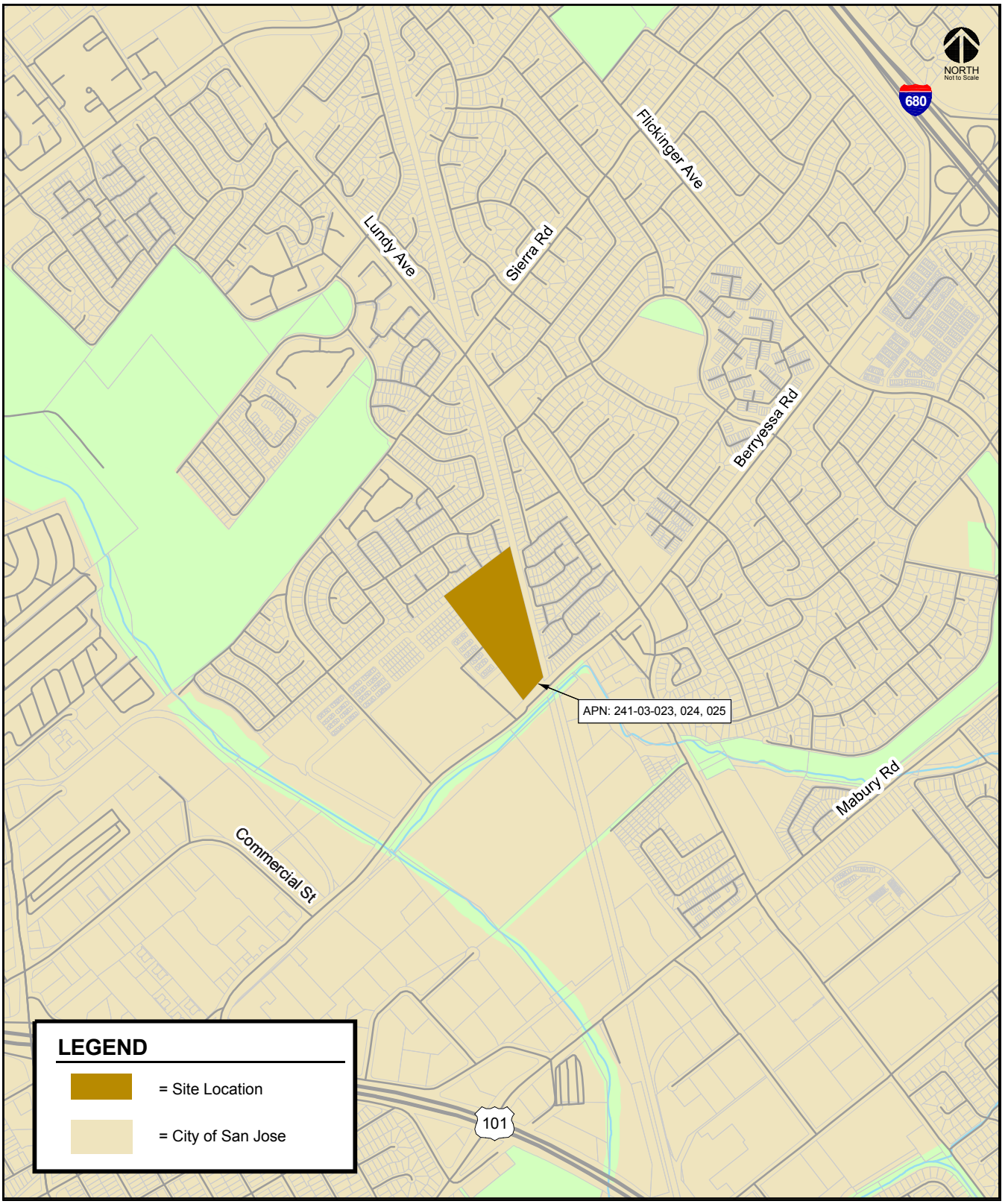


Figure 4
Location of GPA Site 3: GP17-017 (Dupont Street)

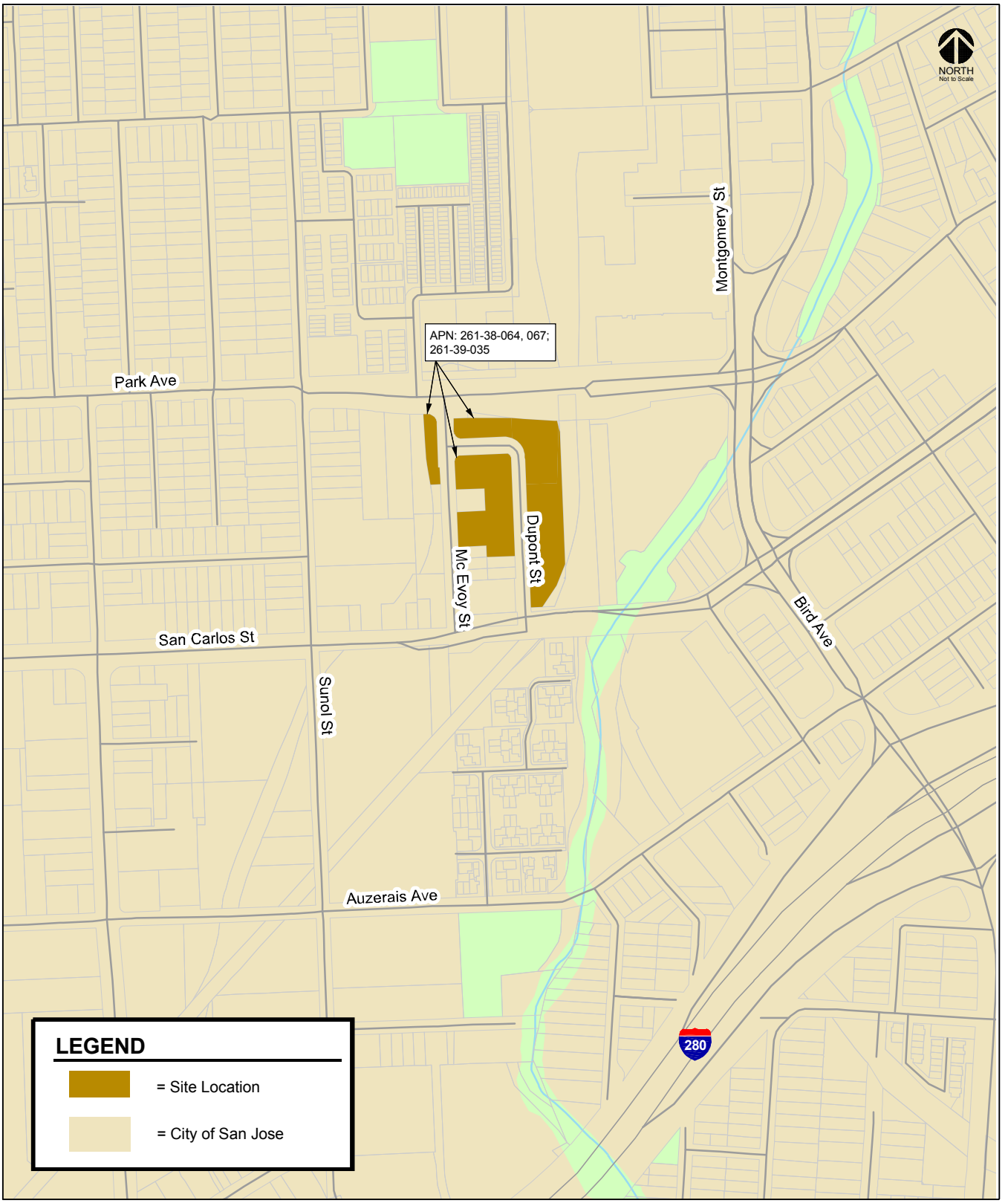


Figure 5
Location of GPA Site 4: GP18-001 (San Felipe Road)

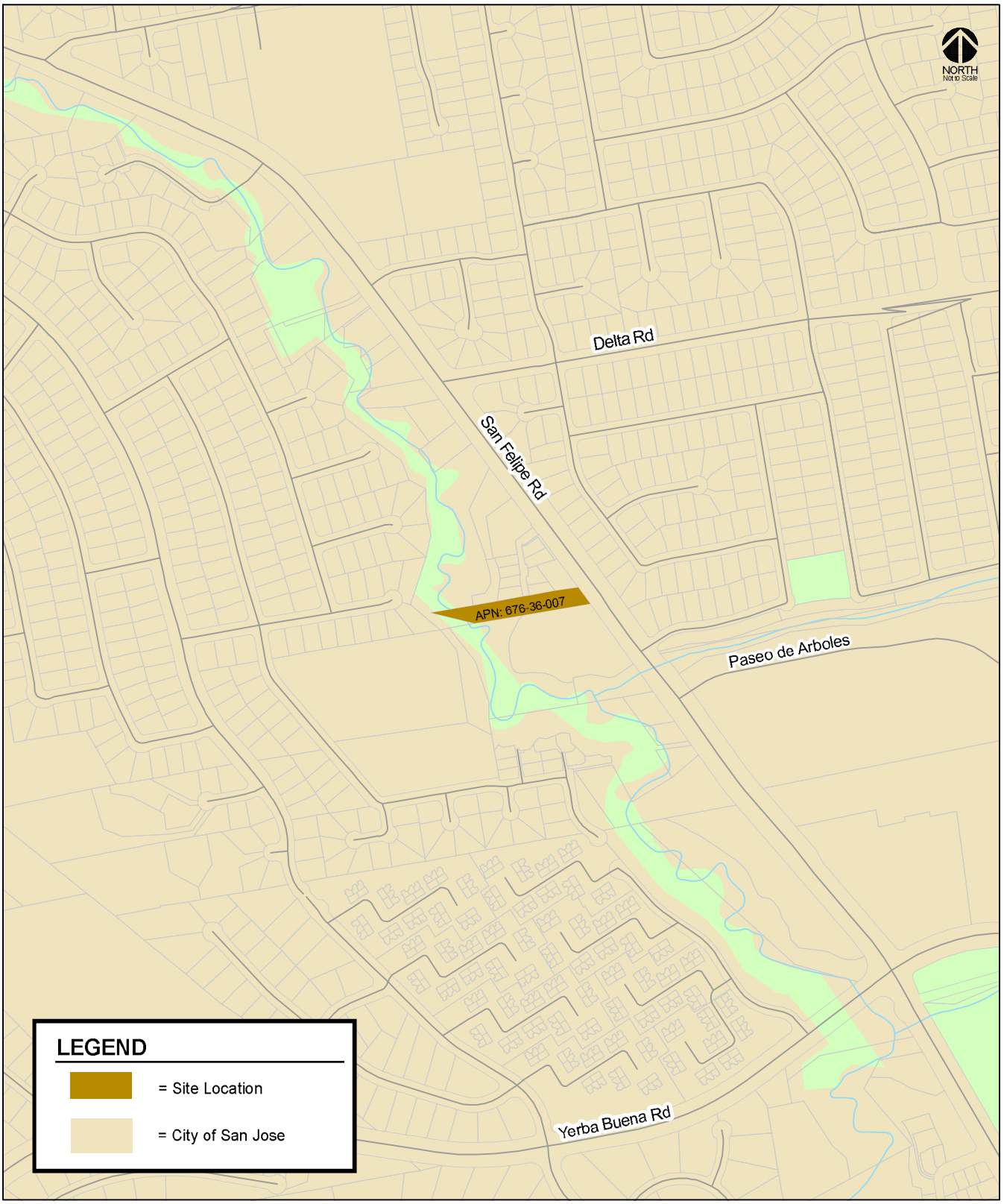


Figure 6
Location of GPA Site 5: GP18-002 (Meridian Avenue)

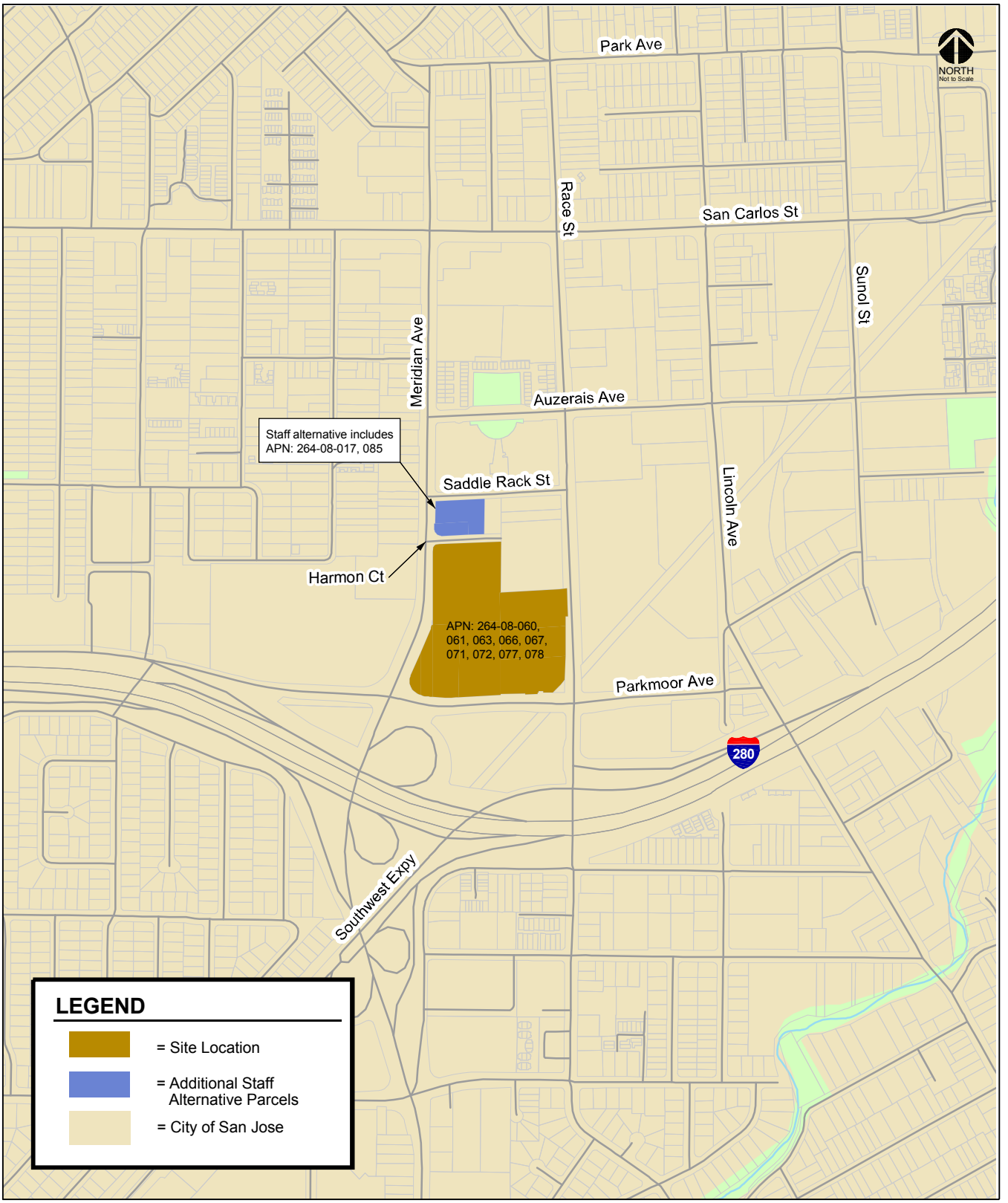


Figure 7
Location of GPA Site 6: GP18-004 (Union Avenue)

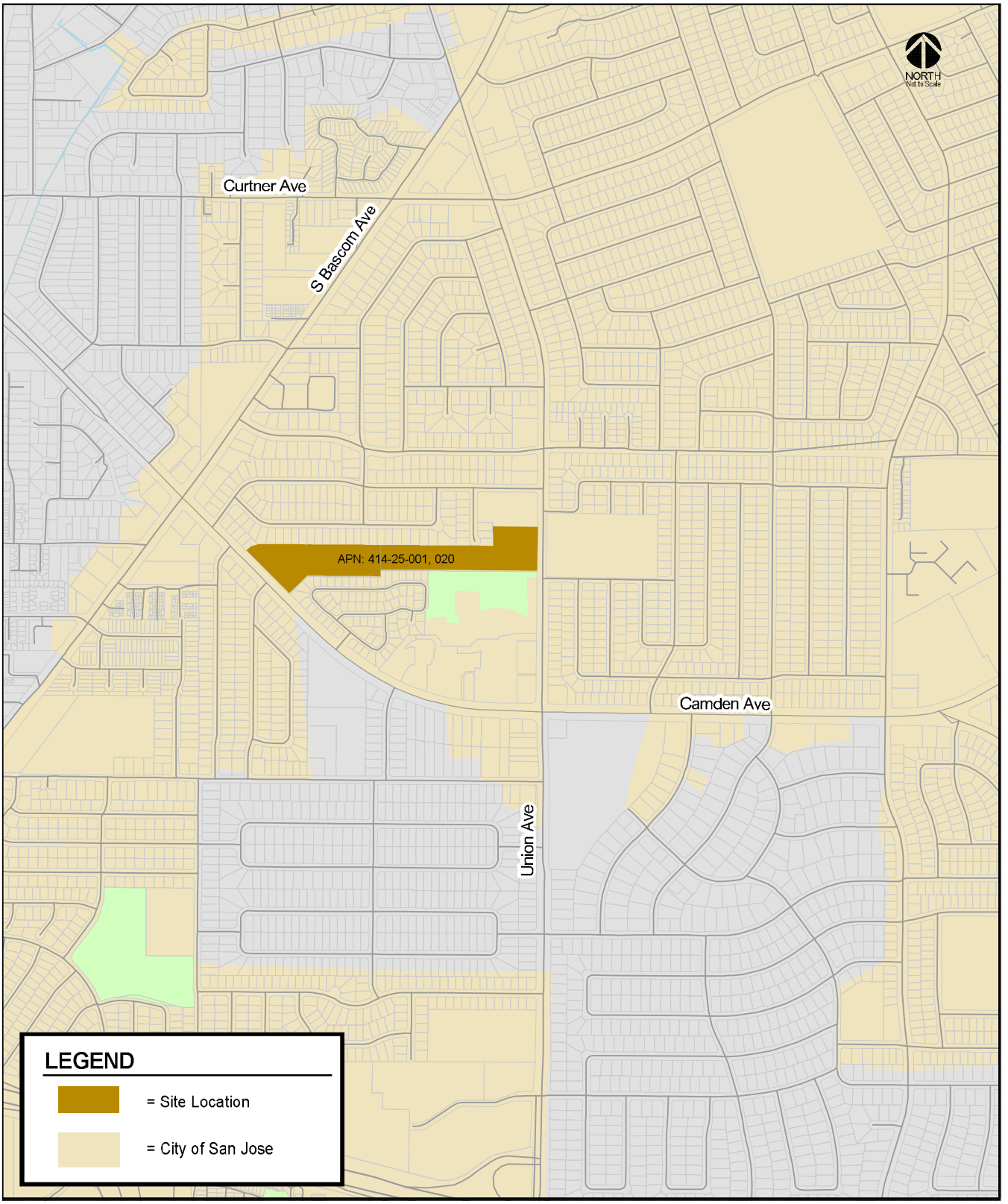


Figure 8
Location of GPA Site 7: GP18-005 (Lelong Street)

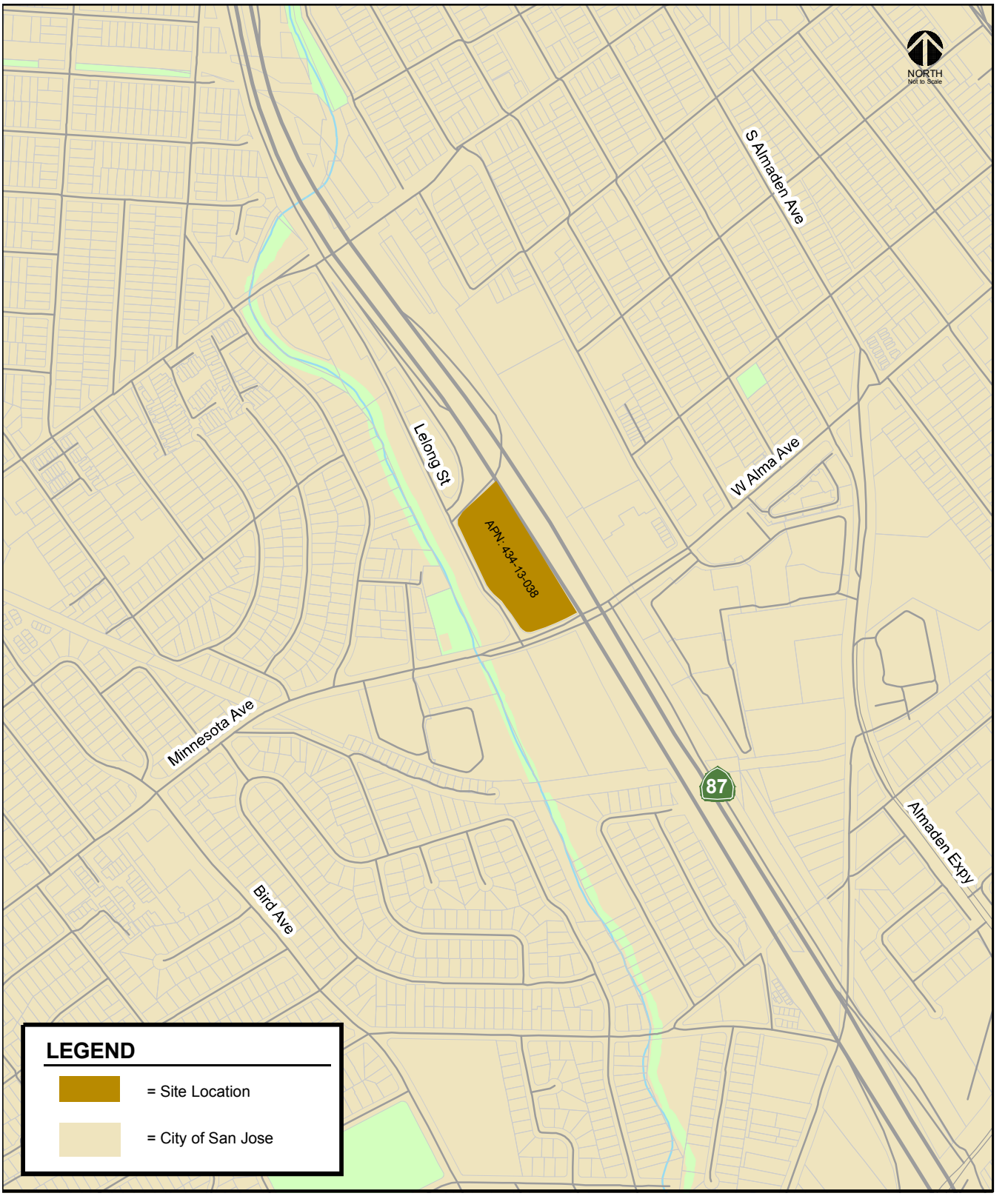


Figure 9
Location of GPA Site 8: GP18-006 (Piercy Road)

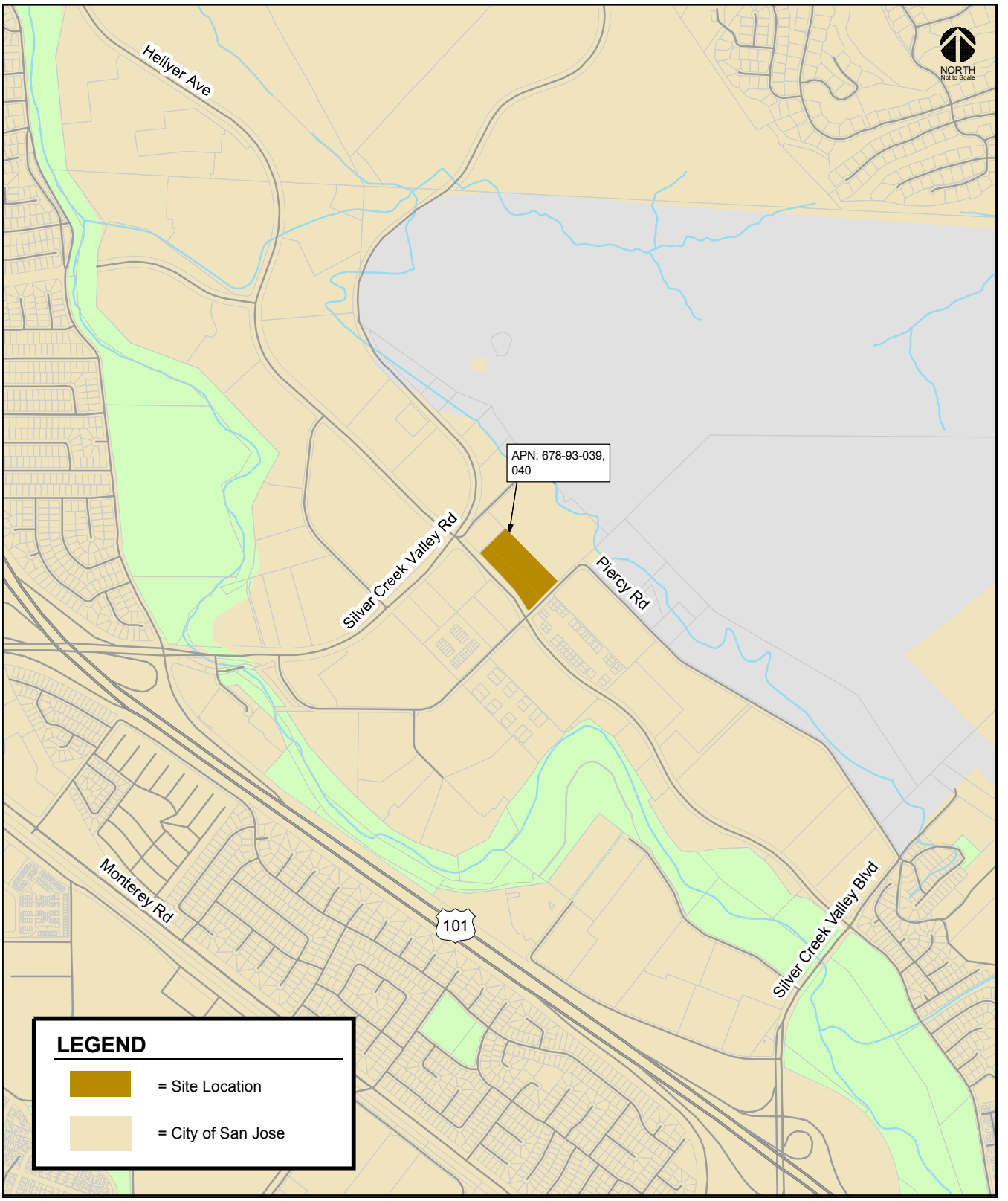


Figure 10
Location of GPA Site 9: GP18-008 (Park Avenue)

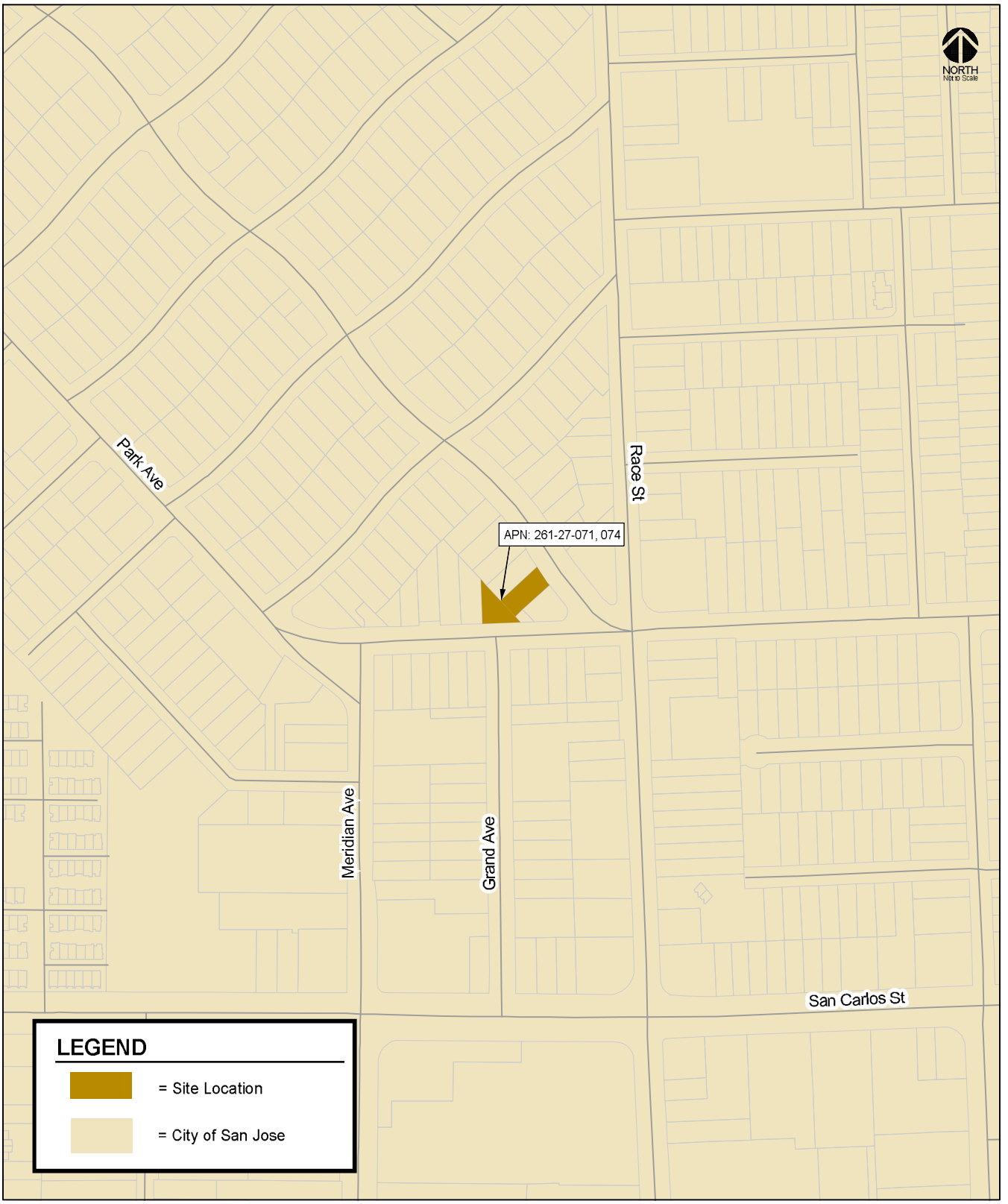
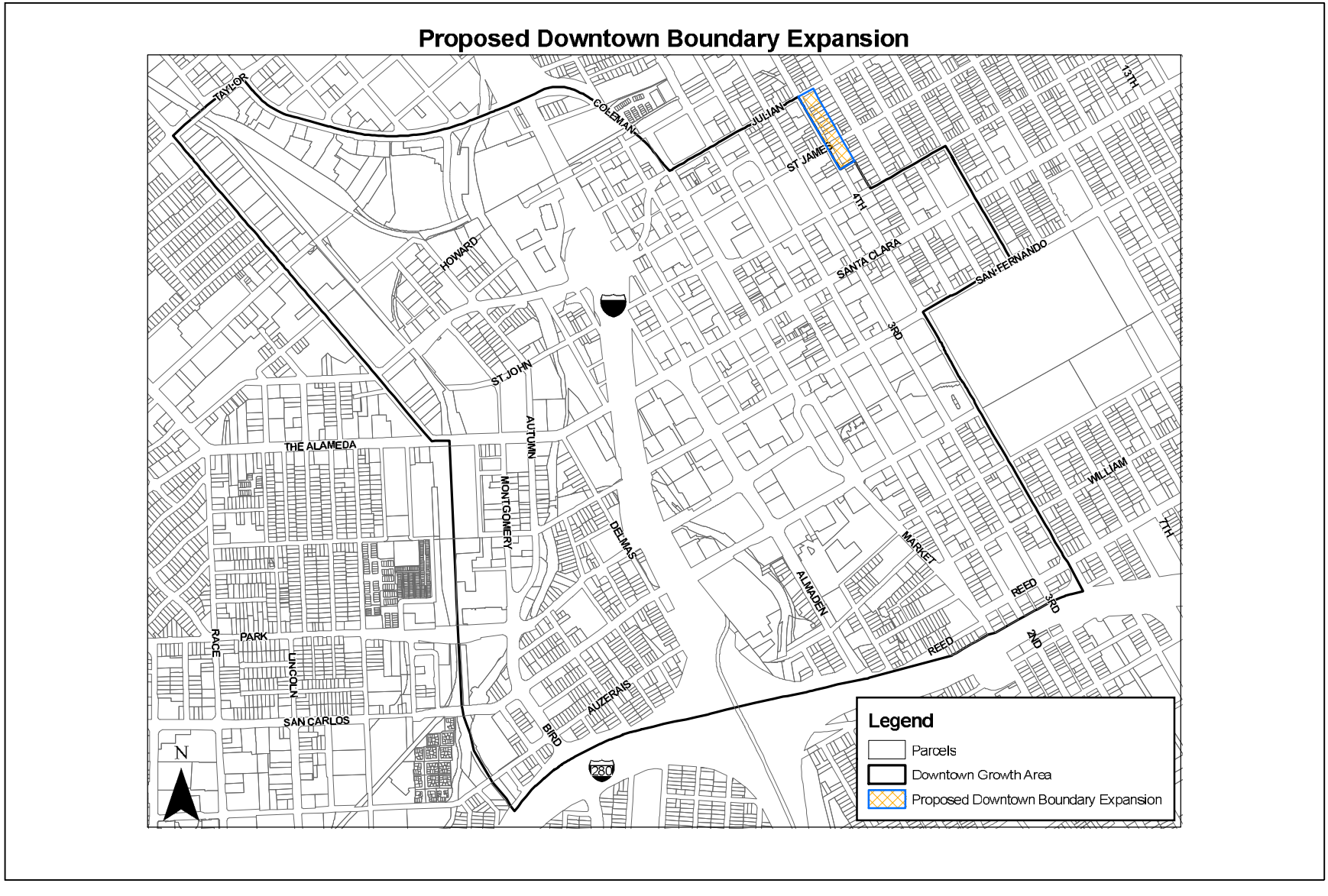


Figure 11
Downtown Strategy Plan Boundary



3. Analysis Methodology and Impact Criteria

This chapter describes the travel demand forecasting modeling methodology used for the analysis and the methods used to determine the traffic conditions for the study scenarios described in the previous chapter. It includes descriptions of the measures of effectiveness (MOE) and the applicable impact criteria for GP traffic analysis.

Travel Demand Forecasting Model

The citywide travel demand forecasting (TDF) model was prepared as part of the Envision San José 2040 GP. The TDF model was developed to provide improved citywide travel demand forecasting as part of continued planning efforts to address transportation infrastructure needs and to assist in the update of the City's GP. The model was developed from the VTA's countywide travel demand model, based on Metropolitan Transportation Commission (MTC's) BAYCAST trip-based regional model. The VTA model contains all cities and counties within the model's extents roughly bounded by southern Monterey County, eastern San Joaquin County, northern Sonoma County, and the Pacific Ocean. The San José model is a sub-area model of the VTA model – it maintains the general inputs (roadway network, land use, trip generation rates, etc.), structure, and process as the VTA model, but with refinement within the City of San José. This allows regional travel patterns and behavior to be accounted for in the focused area of San José, which will become more important with the recent legislative requirements associated with greenhouse gas quantification and impacts.

The VTA and San José models both include four elements traditionally associated with models of this kind. These elements include trip generation, trip distribution, mode choice, and traffic assignment.

- **Trip Generation.** Trip generation involves estimating the number of trips that would occur with the proposed GP land uses. The City's TDF model includes trip generation formulas based on the MTC regional travel demand model. Trip generation is estimated based on the type and amount of specific land uses within each travel analysis zone (TAZ). The TDF model produces trip estimates in person trips (as opposed to vehicle trips, which are typically used in near-term traffic analyses).
- **Trip Distribution.** Trip distribution involves distributing the trips to various internal destinations and external gateways. The model pairs trip origins and trip destinations (starting and ending points) for each person trip based on the type of trip (e.g., home-to-work, home-to-school, etc.) and the distance a person is willing to travel for that purpose. The distance a person is willing to travel is determined by a gravity model, which is analogous to Newton's law of gravity. In a gravity model, estimates are made about how many trips occur between two locations where

the interaction between those two locations diminishes with increasing distance, time, and cost between them.

- **Mode Choice.** Mode choice, as assigned by the model, determines which mode of transport a person will choose for each trip, based on the availability of a vehicle, the trip distance, and the trip purpose.
- **Traffic Assignment.** Traffic assignment involves determining which route to take to travel between the trip origin and destination. The model assigns the trips to the roadway network to minimize travel time between the start and end points.

Subsequent trip distribution, assignment, and mode choice iterations are completed by the model to account for roadway congestion. These iterations continue under equilibrium traffic conditions until the optimal trip assignment is reached.

Transportation Network and Traffic Analysis Zones (TAZs)

The fundamental structure of the model includes a computer readable representation of the roadway system (highway network) that defines roadway segments (links) identified by end points (nodes). Each roadway link is further represented by key characteristics (link attributes) that describe the length, travel speeds, and vehicular capacity of the roadway segment. Small geographic areas (TAZs) are used to quantify the planned land use activity throughout the City's planning area. The boundaries of these small geographic areas are typically defined by the modeled roadway system, as well as natural and man-made barriers that have an effect on traffic access to the modeled network. Transit systems are represented in the model by transit networks that are also identifiable by links and nodes. Unlike the roadway network, the key link attributes of a transit link are operating speed and headways – elapsed time between successive transit services. Transit stops and "dwelling times" (the time allowed for passengers embarking and disembarking transit vehicles) are described as transit node attributes. Transit networks are further grouped by type of transit (rail versus bus) and operator (VTA bus versus AC Transit bus). Transit accessibility for each TAZ is evaluated by proximity to transit stops or stations, and the connectivity of transit lines to destinations.

The socioeconomic data for each TAZ in the model includes information about the number of households (stratified by household income and structure type), population, average income, population age distribution, and employment (stratified by groupings of Standard Industrial Codes). The worker per household ratios and auto ownership within a TAZ are calculated based on these factors and the types and densities of residences. The model projects trip generation rates and the traffic attributable to residents and resident workers, categorized by trip purposes, using set trip generation formulas that are based on the MTC regional travel demand model. The land use data and roadway network used for the GP base year reflect land use development and roadway projects completed as of approximately mid-2015.

Traffic Assignment

Travel times within and between TAZs (intra-zonal, inter-zonal and terminal times) are developed from the network being modeled. Travel times within zones (intra-zonal travel times) are derived for each zone based on half its average travel time to the nearest three adjacent zones. Time to walk to and from the trip maker's car (terminal times) are also added. The projected daily trips are distributed using a standard gravity model and friction factors calibrated for the modeling region, which presently consists of 13 counties.

The City of San José TDF model can estimate up to 7 modes of transportation:

- auto drive alone

- auto carpool with two persons
- auto carpool with three+ persons
- rail transit
- bus transit
- bicycle
- walk

Before the traffic is assigned to the roadway networks, time-of-day factors and directionality factors are applied to automobile trips occurring during:

- AM peak hour
- AM 4-hour peak
- PM peak hour
- PM 4-hour peak
- mid-day 6-hour
- mid-night 10-hour periods

The assignment of the trip tables to the roadway network uses a route selection procedure based on minimum travel time paths (as opposed to minimum travel distance paths) between TAZs and is done using a capacity-constrained user equilibrium-seeking process. This capacity constrained traffic assignment process enables the model to reflect diversion of traffic around congested areas of the overall street system. High Occupancy Vehicle (HOV) lanes on freeways, expressways, and on-ramps are specifically dealt with in the model network, with access restricted to auto-shared-ride mode trips only, similar to real world operations of roadway facilities with HOV lanes.

Transit Mode Share

Transit use is modeled for peak and non-peak periods based on computed transit levels of services (speeds and wait times). Based on the conditions that influence transit speeds and wait times (such as traffic congestion), transit use numbers are modified to reflect the likelihood of transit use, based on the constraints to the system. This feedback loop is a modern enhancement in the model to address the dynamics of transit ridership related to the expansion or contraction of roadway capacities.

In addition to providing projected peak hour and peak period volumes and ratios comparing projected traffic volume to available roadway capacity (V/C ratios) on each roadway segment, the model provides information on vehicle-miles and vehicle-hours of travel by facility type (freeway, expressways, arterial streets, etc.). These informational reports can be used to compare projected conditions under the adopted GP with the impacts of proposed land use amendments. The City's TDF model is intended for use as a "macro analysis tool" to project probable future conditions. Therefore, the TDF model is best used when comparing alternative future scenarios, and is not designed to answer "micro analysis level" operational questions typically address in detailed traffic impact analyses (TIAs).

General Plan Transportation Network

The GP TDF model includes all major transportation infrastructure identified in the Envision San José 2040 *Land Use/Transportation Diagram*, including planned infrastructure that is not yet built and/or funded.

Measures of Effectiveness

This analysis addresses the long-range impacts of the proposed GP land use adjustments on the citywide transportation system by applying measures of effectiveness (MOEs) developed for the Envision San José 2040 GP. The results of the analysis for the proposed land use adjustments are compared to the current GP to determine if the proposed adjustments would result in any new or substantially more severe transportation impacts. The long-range analysis includes analysis of the following MOEs:

- **Vehicle Miles Traveled (VMT) per Service Population.** VMT per service population is a measure of the daily vehicle miles traveled divided by the number of residents and employees within the City of San José. VMT per service population (residents + employees) is used for the analysis as opposed to VMT per capita (residents only), since per service population more accurately captures the effects of land use on VMT. The City not only has residents that travel to and from jobs, but also attracts regional employees. VMT is calculated based on the number of vehicles multiplied by the distance traveled by each vehicle in miles.
- **Journey-to-Work Mode Share (Drive Alone %).** Mode share is the distribution of all daily work trips by travel mode, including the following categories: drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips.
- **Average Travel Speeds within the City's Transit Priority Corridors.** Average travel speed for all vehicles (transit and non-transit vehicles) in the City's 14 transit corridors is calculated for the AM peak hour based on the segment distance dividing the vehicle travel time. A transit corridor is a segment of roadway identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for Valley Transportation Authority (VTA) light-rail transit (LRT), bus rapid transit (BRT), local buses, and other public transit vehicles. Although transit services are found on other street types throughout the City, transit has the utmost priority on Grand Boulevards.
- **Adjacent Jurisdictions.** Roadway conditions on major streets within adjacent jurisdictions are evaluated for the AM 4-hour peak period based on the volume-to-capacity (V/C) ratios of the street segments and the City of San José's contributions to the total traffic of the street segments. V/C is a performance measure and represents the level of saturation (proportion of roadway capacity that is being used). A lower ratio indicates a roadway's capacity is not fully utilized while a larger ratio, or ratio greater than 1.00, represents a roadway's capacity is fully utilized or over saturated. Freeway facilities operated by Caltrans and expressways operated by the Santa Clara County are also considered as adjacent jurisdictions.

Significance Impact Criteria

The City of San José adopted policies and goals in Envision San José 2040 to reduce the drive alone mode share to no more than 40 percent of all daily commute trips, and to reduce the VMT per service population by 40 percent from existing (year 2008) conditions. To meet these goals by the GP horizon year and to satisfy CEQA requirements, the City developed a set of MOEs and associated significance thresholds to evaluate long-range transportation impacts resulting from land use adjustments. Table 5 summarizes the significance thresholds associated with vehicular modes of transportation that were adopted as part of Envision San José 2040 for the evaluation of long-range traffic impacts resulting from proposed land use adjustments and used in this analysis.

Table 5
MOE Significance Thresholds

MOE	Citywide Threshold
VMT/Service Population	Any increase over 2015 baseline conditions
Mode Share (Drive Alone %)	Any increase in journey-to-work drive alone mode share over 2015 baseline conditions
Transit Corridor Travel Speeds	Decrease in average travel speed on a transit corridor below 2015 baseline conditions in the AM peak one-hour period when: 1. The average speed drops below 15 mph or decreases by 25% or more, or 2. The average speed drops by one mph or more for a transit corridor with average speed below 15 mph under 2015 baseline conditions.
Adjacent Jurisdiction	When 25% or more of total deficient lane miles on streets in a adjacent jurisdiction are attributable to the City of San Jose during the AM peak-4-hour period. 1. Total deficient lane miles are total lane miles of street segments with V/C ratios of 1.0 or greater. 2. A deficient roadway segment is attributed to San Jose when trips from the City are 10% or more on the deficient segment.

Source: Envision San Jose 2040 General Plan TIA, October 2010.

In addition to the MOEs described above, the effects of the proposed land use adjustments on transit, bicycle, and pedestrian facilities were evaluated. A significant long-range transportation impact would occur if the adjustments would:

- Disrupt existing, or interfere with, planned transit services or facilities;
- Disrupt existing, or interfere with, planned bicycle facilities;
- Conflict or create inconsistencies with adopted bicycle plans, guidelines, policies, or standards;
- Not provide secure and safe bicycle parking in adequate proportion to anticipated demand;
- Disrupt existing, or interfere with, planned pedestrian facilities;
- Not provide accessible pedestrian facilities that meet current ADA best practices; or
- Create inconsistencies with adopted pedestrian plans, guidelines, policies, or standards.

4. Cumulative General Plan Long Range Analysis

The long-range cumulative traffic impacts resulting from the proposed 2018 GPAs were determined based on the MOEs significance thresholds for vehicle modes of travel and the impact criteria for transit, bicycle and pedestrian described in Chapter 3. The results of the GPA long-range analysis are described below for both the applicant proposed GPA conditions and the Staff Alternative GPA conditions.

Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to calculate daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles.

Since the City of San José not only has residents that travel to and from jobs within the City, but also attracts regional employees, the daily VMT includes some trips traveling outside of the City limits but with origins or destinations within San José. For this reason, the following trip types were included in the VMT calculation:

- Internal-Internal – All daily trips are made entirely within the San José City limits.
- One-half of Internal-External – One-half of the daily trips with an origin located within the San José City limits and a destination located outside of San José.
- One-half of External-Internal – One-half of the daily trips with an origin located outside the San José City limits and a destination located within San José.

Trips that travel through San José to and from other locations (External-External) are not included in the calculation of VMT. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendments is considered a significant impact.

As shown in Table 6, the citywide daily VMT and the VMT per service population would decrease due to both the applicant proposed land use amendments and the Staff Alternative land use amendments when compared to the current GP. This is because (1) the total number of jobs and households would not change citywide as a result of the GPAs (only shifting of households and jobs would occur) and (2) the reallocation of 4,000 households and 10,000 jobs to the Downtown area, where there are more jobs and transit options. Vehicle trips citywide would be reduced due to an increase in trips made via transit

Table 6
Daily Vehicle Miles Traveled Per Service Population

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPAs	2040 General Plan Plus Staff GPAs
Citywide Daily VMT	17,505,088	28,046,059	27,873,371	27,889,424
Citywide Service Population	1,392,946	2,054,758	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650	751,650
Daily VMT Per Service Population	12.6	13.6	13.6	13.6
Increase in VMT/Service Population over General Plan Conditions			***-0.1***	***-0.1***
Significant Impact?			**No**	**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPAs = General Plan Amendments
Service Population = Residents + Jobs
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

and non-motorized travel modes (bicycle and walk) within the Downtown area. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on citywide daily VMT per service population.

Findings: Compared to the current GP, the proposed land use adjustments would not result in an increase in citywide VMT per service population. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on citywide daily VMT per service population. It is important to note that the VMT per service population is based on raw model output and does not reflect the implementation of adopted GP policies and goals that would further reduce VMT by increased use of non-auto modes of travel.

Journey-to-Work Mode Share

The San José GP TDF model was used to calculate citywide journey-to-work mode share percentages. Mode share is the distribution of all daily work trips by travel mode, including drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendments is considered a significant impact.

Table 7 summarizes the citywide journey-to-work mode share analysis results. Compared to the current Envision San José 2040 GP, the percentage of journey-to-work drive alone trips would decrease slightly and the percentage of transit and walk trips would increase slightly as a result of both the applicant proposed GPAs and the Staff Alternative GPAs. Therefore, cumulatively, the 2018 GPAs,

Table 7
Journey-to-Work Mode Share

Mode	Base Year (2008)	Base Year (2015)		2040 General Plan (Baseline)		2040 General Plan Plus GPAs		2040 General Plan Plus Staff GPAs	
	%	Trips	%	Trips	%	Trips	%	Trips	%
Drive Alone	78.9%	753,264	79.7%	1,098,198	72.0%	1,089,340	71.5%	1,089,390	71.5%
Carpool 2	11.7%	85,496	9.0%	138,716	9.1%	137,450	9.0%	137,635	9.0%
Carpool 3+	4.1%	28,526	3.0%	55,275	3.6%	54,544	3.6%	54,595	3.6%
Transit	3.4%	48,181	5.1%	177,546	11.6%	185,532	12.2%	185,018	12.1%
Bicycle	0.7%	14,120	1.5%	26,119	1.7%	26,357	1.7%	26,468	1.7%
Walk	1.3%	15,666	1.7%	28,839	1.9%	29,744	2.0%	29,791	2.0%
Increase in Drive Alone Percentage over General Plan Conditions							-0.5%		-0.5%
Significant Impact?							**No**		**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPAs = General Plan Amendments
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

both applicant proposed and Staff Alternative, would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

Findings: The proposed land use adjustments will not result in an increase of drive alone trips when compared to the current GP conditions. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on citywide journey-to-work mode share.

Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. A transit corridor is a segment of roadway identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 8 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendments would have minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in

Table 8
AM Peak-Hour Vehicle Speeds (mph) for San José Transit Priority Corridors

Transit Priority Corridor	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPAs			2040 General Plan Plus Staff GPAs		
	Speed (mph)	Speed (mph)	Speed (mph)	% Change (GPplusGPAs - GP) / GP	Absolute Change (GPplusGPAs - GP)	Speed (mph)	% Change (GPplusStaffGPAs - GP) / GP	Absolute Change (GPplusStaffGPAs - GP)
2nd St from San Carlos St to St. James St	16.6	15.7	15.2	-3.2%	-0.5	15.3	-2.5%	-0.4
Alum Rock Av from Capitol Av to US 101	21.3	16.6	16.8	1.4%	0.2	16.9	1.5%	0.3
Camden Av from SR 17 to Meridian Av	23.1	18.1	17.8	-1.8%	-0.3	17.9	-1.6%	-0.3
Capitol Av from S. Milpitas Bl to Capitol Expwy	27.1	22.8	22.8	0.3%	0.1	22.9	0.3%	0.1
Capitol Expwy from Capitol Av to Meridian Av	33.0	26.9	27.0	0.2%	0.1	27.1	0.5%	0.1
E. Santa Clara St from US 101 to Delmas Av	20.4	16.2	15.6	-3.5%	-0.6	15.9	-2.1%	-0.3
Meridian Av from Park Av to Blossom Hill Rd	24.9	20.9	20.6	-1.4%	-0.3	20.6	-1.3%	-0.3
Monterey Rd from Keyes St to Metcalf Rd	27.4	19.2	20.3	5.4%	1.0	20.1	4.5%	0.9
N. 1st St from SR 237 to Keyes St	21.3	13.9	13.7	-1.4%	-0.2	13.8	-0.4%	-0.1
San Carlos St from Bascom Av to SR 87	24.8	20.8	20.5	-1.5%	-0.3	20.5	-1.5%	-0.3
Stevens Creek Bl from Bascom Av to Tantau Av	24.3	18.8	18.6	-0.6%	-0.1	18.7	-0.1%	0.0
Tasman Dr from Lick Mill Bl to McCarthy Bl	22.7	13.8	13.7	-0.7%	-0.1	14.1	1.9%	0.3
The Alameda from Alameda Wy to Delmas Av	20.5	14.3	14.1	-1.5%	-0.2	14.2	-0.8%	-0.1
W. San Carlos St from SR 87 to 2nd St	20.0	19.3	18.9	-1.9%	-0.4	19.0	-1.4%	-0.3

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPAs = General Plan Amendments
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

travel speeds of 0.6 mph or less (or a change of 3.5% or less) on ten corridors due to the applicant proposed GPAs, and decrease in travel speeds of 0.4 mph or less (or a change of 2.5% or less) on eight corridors due to the Staff Alternative GPAs. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Findings: The proposed land use adjustments would not result in a decrease in travel speeds of greater than one mph or 25 percent on any of the 14 transit priority corridors when compared to current GP conditions. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Adjacent Jurisdictions

The San José GP TDF model was used to calculate the number of lane miles of street segments with V/C ratios of 1.0 or greater during the peak 4-hour AM period within adjacent jurisdictions.

The effect of the proposed land use adjustments is evaluated based on the percentage of traffic that would be added to the deficient roadways. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), a deficient roadway segment in an adjacent jurisdiction is attributed to San José when trips originating from residents and jobs within San José equal 10% or more on the deficient segment. An impact to an adjacent jurisdiction is considered significant when 25% or more of total deficient lane miles are attributable to the City of San José. The 25% threshold represents what would be a noticeable change in traffic.

Table 9 summarizes the City of San José's traffic impacts on the roadway segments within adjacent jurisdictions. City of San José traffic would significantly impact roadway segments within the same 13 adjacent jurisdictions under both current GP and proposed and Staff Alternative GPAs conditions. With the proposed land use amendments under the applicant proposed GPA, the percent of deficient lane miles attributable to the City would decrease by 2% at one of the 13 impacted jurisdictions and would remain unchanged at the remaining 12 impacted jurisdictions, compared to the current GP. With the proposed land use amendments under the Staff Alternative GPA, the percent of deficient lane miles attributable to the City would remain unchanged at all 13 impacted jurisdictions, when compared to the current GP. Additionally, San José traffic contribution to Los Altos roadway segments would increase from 17% under the current GP to 20% and 23% under the proposed and Staff Alternative GPAs, respectively. However, the Los Altos roadway segments would not be significantly impacted under the current GP conditions or the proposed GPAs conditions since the percentage of deficient lane miles attributable to San José would continue to be less than the 25% threshold. The proposed land use amendments would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Findings: The proposed land use amendments would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Although the TDF modeling results show that San José traffic contribution to Los Altos roadway segments would increase from 17% under the current GP to 20% and 23% under the proposed and Staff Alternative GPAs, respectively, the Los Altos roadway segments would not be significantly impacted under the current GP conditions or the proposed GPAs conditions because the San José contribution is below the 25% threshold. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Table 9
AM 4-Hour Traffic Impacts in Adjacent Jurisdictions

City	Base Year (2015)			2040 General Plan (Baseline)			2040 General Plan Plus GPAs			2040 General Plan Plus Staff GPAs		
	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose
Campbell	0.12	0.12	100%	1.15	1.15	100%	1.15	1.15	100%	1.11	1.11	100%
Cupertino	1.67	1.19	72%	2.60	2.23	86%	2.60	2.23	86%	2.60	2.23	86%
Gilroy	0.34	0.34	100%	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%
Los Altos	0.50	0.00	0%	1.49	0.25	17%	1.28	0.25	20%	1.28	0.30	23%
Los Altos Hills	0.38	0.13	35%	2.51	1.95	78%	2.51	1.95	78%	2.51	1.95	78%
Los Gatos	0.22	0.22	100%	1.34	1.34	100%	1.34	1.34	100%	1.34	1.34	100%
Milpitas	0.39	0.39	100%	5.54	5.54	100%	5.76	5.76	100%	5.54	5.54	100%
Monte Sereno	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%
Morgan Hill	0.00	0.00	0%	0.24	0.24	100%	0.24	0.24	100%	0.24	0.24	100%
Mountain View	0.39	0.28	71%	1.60	1.48	93%	1.60	1.48	93%	1.40	1.31	93%
Palo Alto	0.88	0.31	35%	2.42	0.76	31%	2.42	0.76	31%	2.42	0.76	31%
Santa Clara	0.00	0.00	0%	0.60	0.60	100%	0.34	0.34	100%	0.34	0.34	100%
Saratoga	0.00	0.00	0%	0.63	0.63	100%	0.63	0.63	100%	0.63	0.63	100%
Sunnyvale	0.81	0.81	100%	0.53	0.48	90%	0.53	0.48	90%	0.53	0.48	90%
Caltrans Facilities	5,743.69	4,433.43	77%	5,856.67	4,783.14	82%	5,796.73	4,778.16	82%	5,796.54	4,774.44	82%
Santa Clara County Expressways	0.62	0.51	81%	5.97	5.95	100%	4.84	4.73	98%	4.75	4.73	100%

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPAs = General Plan Amendments
1. Total deficient lane miles are total lane miles of street segments with V/C ratios of 1.0 or greater.
2. A deficient roadway segment is attributed to San Jose when trips from the City are 10% or more on the deficient segment.
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Impacts on Transit, Bicycle, and Pedestrian Circulation

Transit Services or Facilities

Planned transit services and facilities include additional rail service via the future Bay Area Rapid Transit (BART) extension, light rail transit (LRT) extensions, new bus rapid transit (BRT) services, and the proposed California High Speed Rail (HSR) project. The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would result in an adverse effect on existing or planned transit facilities. Therefore, the proposed 2018 GPAs land use adjustments, both applicant proposed and Staff Alternative, would not substantially disrupt existing, or interfere with planned transit services or facilities.

Bicycle Facilities

The adopted Envision San José 2040 GP supports the goals outlined in the City's Bike Plan 2020 and contains policies to encourage bicycle trips (Policies TR-1.1, TR-1.2,TR-1.4 through TR-1.9, TR 2.1 through TR 2.11, TR-7.1, TN-1.1 through TN-1.5, TN-2.1 through TN-2.7, and TN-3.1 through 3.6; Implementing Actions TR-1.12 thorugh TR-1.15, TR-2.12 through TR-2.21, TR-7.2, TR-7.3, TN-1.6, TN-2.8 through 2.10, and TN-3.7; Performance Measures TN-2.11, TN-2.12). The proposed GPA land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned bicycle facilities. Therefore, the proposed 2018 GPA land use adjustments, both applicant proposed and Staff Alternative, would not substantially disrupt existing, or interfere with planned bicycle facilities; conflict or create inconsistencies with adopted bicycle plans, guidelines, policies, or standards; and provide insecure and unsafe bicycle parking in adequate proportion to anticipated demand.

Pedestrian Facilities

The adopted Envision San José 2040 GP contains goals and policies (Policies TR-1.1, TR-1.2,TR-1.4 through TR-1.9, TR-2.1 through TR-2.11, TR-7.1, TN-1.1 through TN-1.5, TN-2.1 through TN-2.7, and TN-3.1 through 3.6; Implementing Actions TR-1.12 through TR-1.15, TR-2.12 through TR-2.21, TR-7.2, TR-7.3, TN-1.6, TN-2.8 through 2.10, and TN-3.7; Performance Measures TN-2.11, TN-2.12) to improve pedestrian walking environment, increase pedestrian safety, and create a land use context to support non-motorized travel. The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned pedestrian facilities. Therefore, the proposed 2018 GPAs land use adjustments, both applicant proposed and Staff Alternative, would not substantially disrupt existing, or interfere with planned pedestrian facilities; create inconsistencies with adopted pedestrian plans, guidelines, policies, or standards; and provide accessible pedestrian facilities that would not meet current ADA best practice.

5.
Berryessa Road (Site-Specific GPA Traffic Analysis)

This report presents the results of the long-range site-specific traffic impact analysis for the proposed Berryessa Road General Plan Amendment (GP17-016). The purpose of the General Plan Amendment (GPA) traffic analysis is to assess the long-range impacts of the proposed land use amendment to the Berryessa Road General Plan site on the citywide transportation system. The potential traffic impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP). In addition, a near term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP will be required once a development application is submitted to the City.

General Plan Amendment Site Description

The project consists of amending the adopted land use designation of the Envision San José 2040 GP for the approximately 13.02-acre site located on the north side of Berryessa Road near the Berryessa BART Station/Berryessa Road intersection and west of the BART right-of-way. The Berryessa Road GPA site location is presented on Figure 12. The adopted GP land use designation for the site is *Industrial Park*, and the proposed amendment involves changing the adopted land use to *Urban Village.* The site is partially occupied by several industrial buildings. The proposed land use change for development of the site would be consistent with the immediate and surrounding land uses.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 peak-hour trips to be generated by the subject site due to proposed increases in households or employment would be required to prepare a site-specific GPA traffic analysis. The Berryessa Road GPA site is located outside of the specific subareas. According to the TDF modeling results, the proposed amendment at the Berryessa Road GP site would result in 1,627 additional households and 379 additional jobs on the site. The increase in households and jobs would result in an additional 1,059 AM and 1,301 PM peak-hour trips at the Berryessa Road GPA site when compared to the current GP land use designation (see Table 10). Therefore, a site-specific GPA traffic analysis is required for the proposed land use amendment. The GPA does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

Figure 12
Berryessa Road GPA Site Location

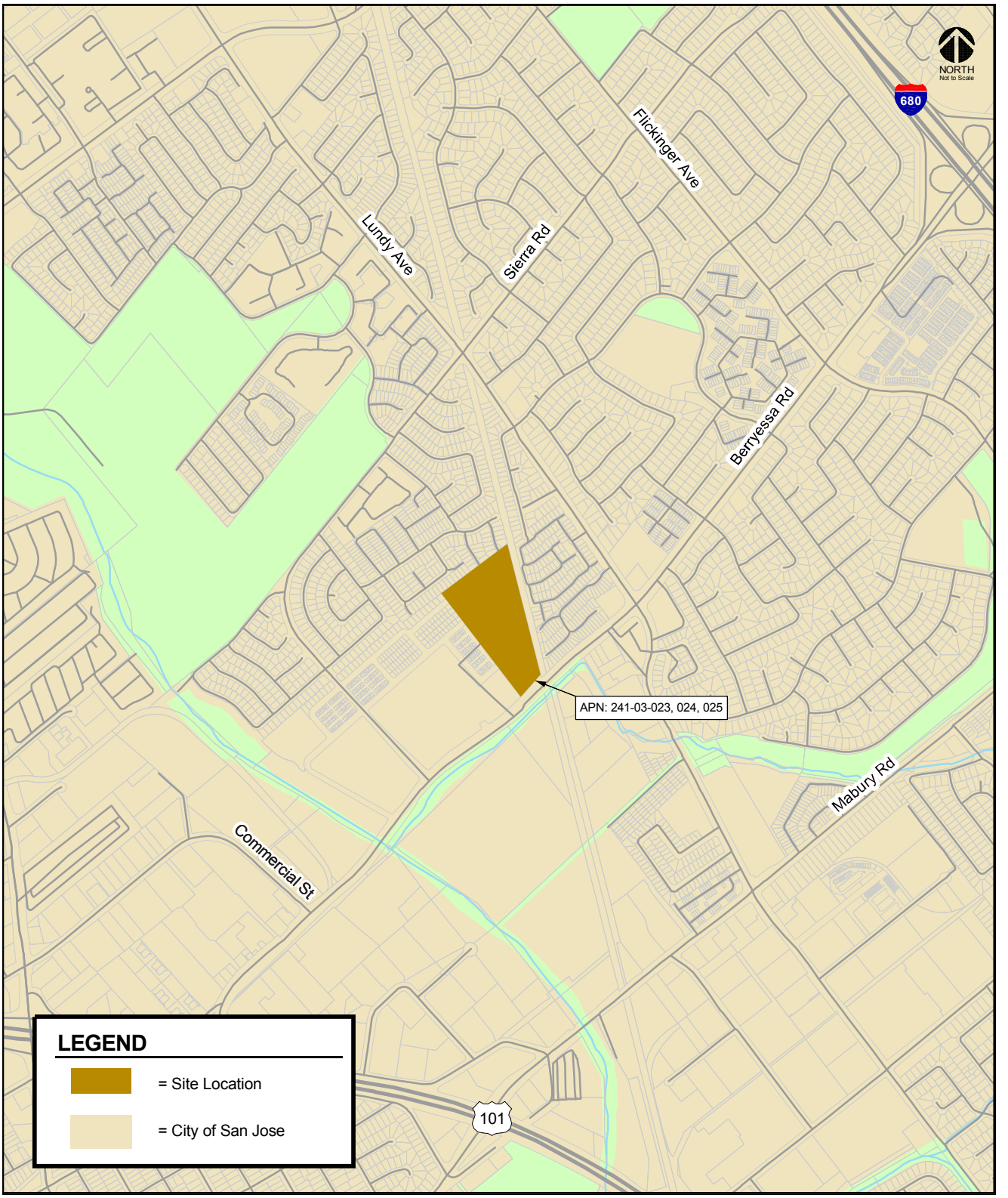


Table 10
Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPA at Berryessa Road Site

Site Number	Site Name	General Plan (Baseline) [1]		General Plan Amendment [2]		Net Land Use Change		Net Peak-Hour Trip Change	
		TOTHH	TEMP	TOTHH	TEMP	TOTHH	TEMP	AM	PM
2	GP-17-016 [Berryessa Road]	1,578	6,749	3,205	7,128	1,627	379	**1,059**	**1,301**

Notes: TOTHH = total number of households; TEMP = total number of jobs.
[1] Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP). The buildout of the 2040 GP represents baseline conditions.
[2] Total number of households and jobs as proposed by the applicant GP Amendments.
Outlined indicates GPA that results in an increase in peak hour trips greater than 250 trips and requires site-specific GPA traffic analysis.
Sources: City of San Jose Planning Department, June 2018
City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, impacts to roadways in adjacent jurisdictions, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses (i.e., including the adopted Four-Year GP Review Land Use adjustments) is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the citywide roadway network to reflect the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendment for the Berryessa Road GP site. Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the Current 2040 GP Conditions to determine any long-range traffic impacts.

Existing Conditions

This section describes the existing conditions for all of the major transportation facilities near the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project site is provided via US 101 and I-680. Local access to the site is provided by Berryessa Road, Lundy Avenue and Sierra Road. These facilities are described below.

US 101 is a north-south freeway that extends northward though San Francisco and southward through Gilroy. Within the study area, US 101 is an eight-lane facility that includes two high-occupancy vehicle (HOV) lanes. Access to the site is provided via its full interchange with Oakland Road.

Interstate 680 (I-680) is an eight-lane freeway providing regional access to San José. It extends in a north-south direction from its junction with I-280 and US 101 near Downtown San José through the East Bay to its junction with I-80 in Fairfield. Access to the site is provided via its full interchange with Berryessa Road.

Berryessa Road is generally a four-lane east-west arterial that runs from Piedmont Road to US 101, at which point it becomes Hedding Street. Berryessa Road provides direct access to the site.

Lundy Avenue is a four-lane north-south arterial that runs from Trade Zone Boulevard south to Commodore Drive, at which point it transitions to King Road. Access to the site is provided via Berryessa Road.

Sierra Road is generally an east-west roadway that runs north from Berryessa Road and proceeds east to east of Flickinger Avenue, where it terminates within a residential area between Flickinger Avenue and I-680. Access to the site is provided via Berryessa Road.

Existing Bicycle and Pedestrian Facilities

There are several bicycle facilities near the Berryessa Road GP site. As defined by the California Department of Transportation (Caltrans), bicycle facilities include Class I bikeways (defined as bike paths off street, which is shared with pedestrians and excludes general motor vehicle traffic), Class II bikeways (defined as striped bike lanes on street), Class III bike routes (defined as roads with bike route signage where bicyclists share the road with motor vehicles), and Class IV cycle tracks (bike lanes physically separated from vehicle traffic by a vertical element. Bicyclists are allowed to ride on any roadway, even if there is no bicycle facility present with the exception of limited access highways.

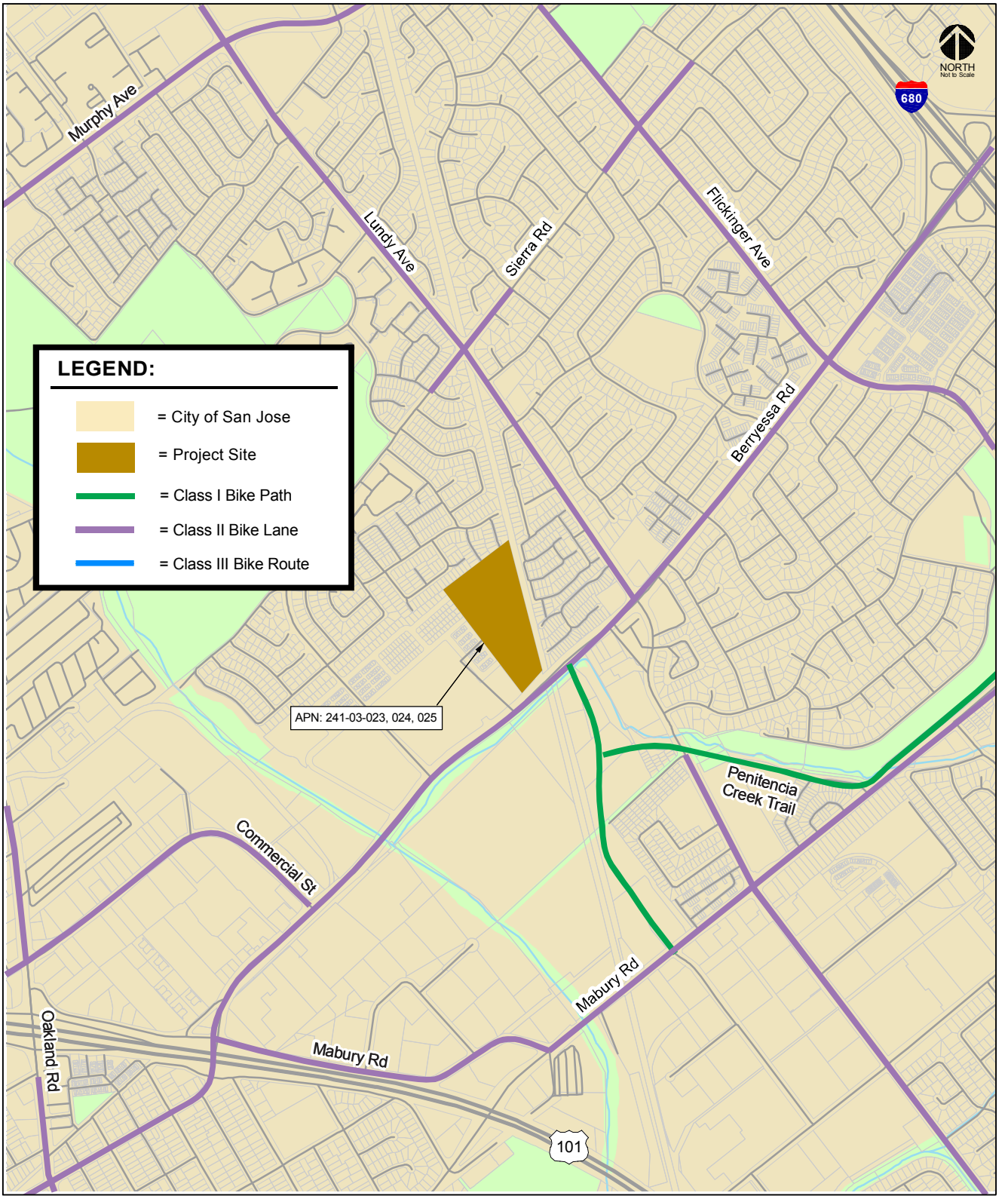
Class II striped bike lanes are provided on the following roadways near the site:

- Berryessa Road – Between Mabury Road and Piedmont Road
- Lundy Avenue – North of Berryessa Road to Trade Zone Boulevard
- Sierra Road – Between Pietro Drive/Briarberry Court and Mossland Drive
- King Road – South of Salamoni Court/Penitencia Creek Trail
- Mabury Road – East of the Flea Market Driveway to White Road
- Commercial Street – North of Berryessa Road to Zanker Road

The Penitencia Creek Trail is a City of San José and Santa Clara County Class I bicycle facility (off-street bike path) that runs between the Berryessa BART Station and Alum Rock Park. A portion of the path utilizes the bicycle lane on Mabury Road. Berryessa BART Driveway also has a bike path between Berryessa Road and Mabury Road. Bike lockers and bike racks will be provided at the Berryessa BART Station. The bike path is also available for use by pedestrians. The existing bicycles facilities are shown on Figure 13.

In addition, the City of San José bicycle master plan*, San José Bike Plan 2020*, provides policies and improvements to bicycle facilities to improve the use of bicycles in the City. It includes an inventory of

Figure 13
Existing Bicycle Facilities (Berryessa Road)



existing bicycle facilities and identifies locations for enhancement of existing facilities by expansion and or establishing potential connections.

Pedestrian facilities near the project consist primarily of sidewalks along the streets in most residential and commercial areas, as well as the aforementioned bike/pedestrian path. Sidewalks are found along virtually all previously described local roadways in the study area, with a few exceptions, and along the local residential streets and collectors near the site. Within the study area, there are no sidewalks along the north side of Sierra Road between Hazlett Way and Araujo Street.

Existing Transit Services

Existing transit services to the study area are provided by the VTA. The VTA transit services are described below and shown on Figure 14.

VTA Bus Services

Local Route 12 runs from San José Civic Center to Eastridge Transit Center via the San José Flea Market and operates only on weekends and holidays between 9:30 AM to 7:00 PM. The nearest bus stop to the Berryessa Road site served by Route 12 is located east of the Sierra Road/ Berryessa Road intersection.

Local Route 61 runs from Good Samaritan Hospital to Sierra Road and Piedmont Road via Bascom Avenue and operates from 6:00 AM to 9:30 PM with 30-minute headways during the weekday commute periods. The nearest bus stop to the Berryessa Road site served by Route 61 is located east of the Berryessa BART Station Driveway/Mabury Road intersection.

Local Route 62 runs from Good Samaritan Hospital to Sierra Road and Piedmont Road via Union Avenue and operates from 5:30 AM to 11:00 PM with 30-minute headways during the weekday commute periods. The nearest bus stop to the Berryessa Road site served by Route 62 is located east of the Sierra Road/Berryessa Road intersection.

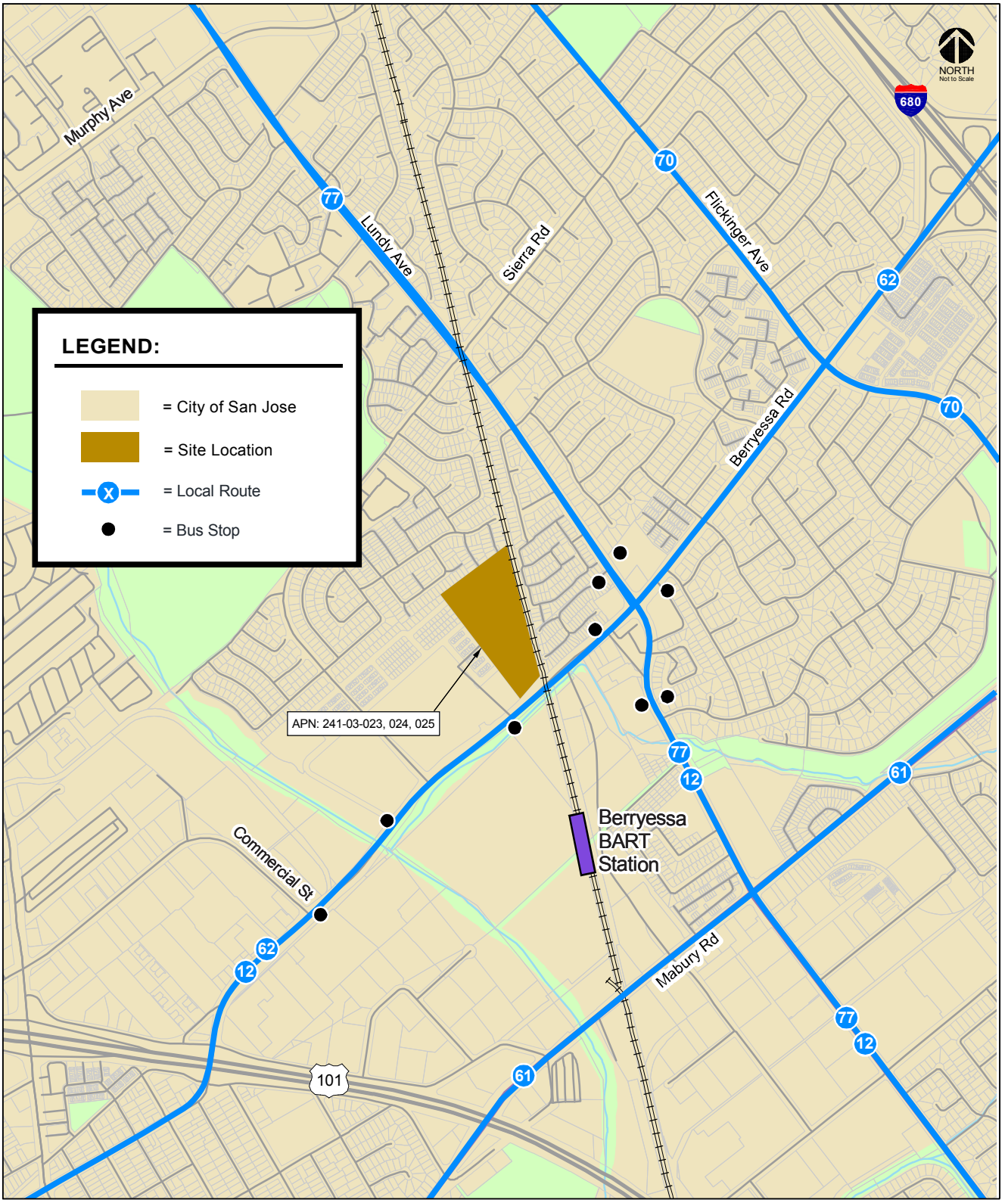
Local Route 70 runs from Capitol LRT Station to Great Mall/Main Transit Center via Flickinger Avenue and operates from 5:00 AM to 11:30 PM with 15-minute headways during the weekday commute periods. The nearest bus stop to the Berryessa Road site served by Route 70 is located at the Flickinger Avenue/ Berryessa Road intersection.

Local Route 77 runs from Eastridge Transit Center to Great Mall/Main Transit Center via King Road/Lundy Avenue and operates from 6:00 AM to 10:00 PM with 15-minute headways during the weekday commute periods. The nearest bus stop to the Berryessa Road site served by Route 77 is located north of the Lundy Avenue/Berryessa Road intersection.

Light Rail Transit (LRT) Service

The Berryessa Road GP site is located approximately 1.5 miles southwest of the Berryessa LRT Station located north of the Capitol Avenue/Berryessa Road intersection. LRT service at the Berryessa LRT station is provided by the Alum Rock-Santa Teresa LRT line, which operates nearly 24 hours a day (4:00 AM to 2:00 AM) with 10-15-minute headways during peak commute and midday hours. The Alum Rock-Santa Teresa LRT line provides service from the Santa Teresa Station in south San José, through Downtown San José to north San José where it curves east and operates along the Tasman Corridor, bends south and runs along the Capitol Corridor, and ultimately terminates in east San José just south of Alum Rock Avenue.

Figure 14
Existing Transit Services (Berryessa Road)



Bay Area Rapid Transit (BART) Station

The Berryessa BART Station is one of two stations planned as part of the first phase of the 16-mile BART Silicon Valley extension project. The station, currently under construction, is located between Berryessa Road and Mabury Road, south of the Berryessa Road GP site. According to the VTA website, the Berryessa BART Station is projected to serve 25,000 daily passengers in 2030, with trains arriving every 7.5 minutes. It will include a multi-story parking garage next to the station and convenient private shuttle and "Kiss-and-Ride" loading areas, as well as a bus transit center, on-site bicycle paths, and indoor bicycle storage. The station is projected to be open by the year 2019.

General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed Berryessa Road site GPA were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to calculate daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendment is considered a significant impact.

As shown in Table 11, both the citywide daily VMT and VMT per service population would decrease slightly with the proposed land use amendment when compared to the current GP. Therefore, the proposed Berryessa Road GPA would result in a *less than significant* impact on the citywide daily VMT per service population.

Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.

Table 12 summarizes the citywide journey-to-work mode share analysis results. When compared to the current GP, the percentage of journey-to-work drive alone trips would not change as a result of the proposed land use amendment. Approximately 72% of the commuters would drive single occupancy vehicles to travel to and from work under the current GP and the current GP with the proposed land use amendment. Therefore, the proposed Berryessa Road GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

Table 11
Daily Vehicle Miles Traveled Per Service Population (Berryessa Road)

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,046,059	28,015,355
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.57	13.65	13.63
Increase in VMT/Service Population over General Plan Conditions			***-0.02***
Significant Impact?			**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Service Population = Residents + Jobs
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Table 12
Journey-to-Work Mode Share (Berryessa Road)

	Base Year (2015)		2040 General Plan (Baseline)		2040 General Plan Plus GPA	
Mode	**Trips**	**%**	**Trips**	**%**	**Trips**	**%**
Drive Alone	753,264	79.7%	1,098,198	72.0%	1,098,538	72.0%
Carpool 2	85,496	9.0%	138,716	9.1%	138,764	9.1%
Carpool 3+	28,526	3.0%	55,275	3.6%	55,145	3.6%
Transit	48,181	5.1%	177,546	11.6%	177,314	11.6%
Bicycle	14,120	1.5%	26,119	1.7%	26,147	1.7%
Walk	15,666	1.7%	28,839	1.9%	28,849	1.9%
Increase in Drive Alone Percentage over General Plan Conditions						0.0%
Significant Impact?						**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 13 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates minimal to no changes in travel speeds on all 14 corridors, with two corridors experiencing decreases in travel speed of less than 0.1 mph (or a change of 0.2% or less), when compared to the current GP. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the proposed Berryessa Road GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Adjacent Jurisdictions

The San José GP TDF model was used to calculate the number of lane miles of street segments with V/C ratios of 1.0 or greater during the peak 4-hour AM period within adjacent jurisdictions. The effect of the proposed land use adjustments is evaluated based on the percentage of traffic that would be added to the deficient roadways. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), a deficient roadway segment in an adjacent jurisdiction is attributed to San José when trips originating from residents and jobs within San José equal 10% or more on the deficient segment. An impact to an adjacent jurisdiction is considered significant when 25% or more of total deficient lane miles are attributable to the City of San José. The 25% threshold represents what would be a noticeable change in traffic.

Table 14 summarizes the City of San José's traffic impacts on the roadway segments within adjacent jurisdictions. City of San José traffic would significantly impact roadway segments within the same 13 adjacent jurisdictions under both the current GP and the current GP plus proposed land use amendment conditions. With the proposed land use amendment, the percentage of deficient lane miles attributable to the City would increase by 2% or less at three of the 13 impacted jurisdictions and would remain unchanged at the remaining 10 impacted jurisdictions, compared to the current GP. Additionally, San José traffic contribution to Los Altos roadway segments would increase from 17% under the current GP to 20% under the proposed land use amendment. However, the Los Altos roadway segments would not be significantly impacted under the current General Plan conditions or the proposed GPA conditions since the percentage of deficient lane miles attributable to San José would continue to be less than the 25% threshold. The proposed land use amendment would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Therefore, the proposed Berryessa Road GPA would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Table 13
AM Peak Hour Vehicle Speeds (mph) for San José Transit Priority Corridors (Berryessa Road)

Transit Priority Corridor	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA	% Change (GPplusGPA - GP) GP	Absolute Change (GPplusGPA - GP)
2nd St from San Carlos St to St. James St	16.6	15.7	15.7	0.0%	0.0
Alum Rock Av from Capitol Av to US 101	21.3	16.6	16.7	0.7%	0.1
Camden Av from SR 17 to Meridian Av	23.1	18.1	18.2	0.0%	0.0
Capitol Av from S. Milpitas Bl to Capitol Expwy	27.1	22.8	22.9	0.4%	0.1
Capitol Expwy from Capitol Av to Meridian Av	33.0	26.9	27.1	0.5%	0.1
E. Santa Clara St from US 101 to Delmas Av	20.4	16.2	16.2	0.1%	0.0
Meridian Av from Park Av to Blossom Hill Rd	24.9	20.9	20.8	-0.1%	0.0
Monterey Rd from Keyes St to Metcalf Rd	27.4	19.2	19.3	0.4%	0.1
N. 1st St from SR 237 to Keyes St	21.3	13.9	13.9	0.2%	0.0
San Carlos St from Bascom Av to SR 87	24.8	20.8	20.9	0.4%	0.1
Stevens Creek Bl from Bascom Av to Tantau Av	24.3	18.8	18.8	0.1%	0.0
Tasman Dr from Lick Mill Bl to McCarthy Bl	22.7	13.8	14.0	1.1%	0.2
The Alameda from Alameda Wy to Delmas Av	20.5	14.3	14.4	0.6%	0.1
W. San Carlos St from SR 87 to 2nd St	20.0	19.3	19.2	-0.2%	0.0

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Table 14
AM 4-Hour Traffic Impacts in Adjacent Jurisdictions (Berryessa Road)

City	Base Year (2015)			2040 General Plan (Baseline)			2040 General Plan Plus GPA		
	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose
Campbell	0.12	0.12	100%	1.15	1.15	100%	1.15	1.15	100%
Cupertino	1.67	1.19	72%	2.60	2.23	86%	2.60	2.23	86%
Gilroy	0.34	0.34	100%	0.00	0.00	0%	0.00	0.00	0%
Los Altos	0.50	0.00	0%	1.49	0.25	17%	1.49	0.30	20%
Los Altos Hills	0.38	0.13	35%	2.51	1.95	78%	2.51	1.95	78%
Los Gatos	0.22	0.22	100%	1.34	1.34	100%	1.34	1.34	100%
Milpitas	0.39	0.39	100%	5.54	5.54	100%	5.54	5.54	100%
Monte Sereno	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%
Morgan Hill	0.00	0.00	0%	0.24	0.24	100%	0.24	0.24	100%
Mountain View	0.39	0.28	71%	1.60	1.48	93%	1.60	1.50	94%
Palo Alto	0.88	0.31	35%	2.42	0.76	31%	2.32	0.76	33%
Santa Clara	0.00	0.00	0%	0.60	0.60	100%	0.60	0.60	100%
Saratoga	0.00	0.00	0%	0.63	0.63	100%	0.63	0.63	100%
Sunnyvale	0.81	0.81	100%	0.53	0.48	90%	0.53	0.48	90%
Caltrans Facilities	5,743.69	4,433.43	77%	5,856.67	4,783.14	82%	5,794.14	4,780.28	83%
Santa Clara County Expressways	0.62	0.51	81%	5.97	5.95	100%	5.97	5.95	100%

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
1. Total deficient lane miles are total lane miles of street segments with V/C ratios of 1.0 or greater.
2. A deficient roadway segment is attributed to San Jose when trips from the City are 10% or more on the deficient segment.
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the Berryessa Road GP site develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.

6. Meridian Avenue (Site-Specific GPA Traffic Analysis)

This report presents the results of the long-range site-specific traffic impact analysis for the proposed Meridian Avenue General Plan Amendment (GP18-002). The Meridian Avenue General Plan Amendment includes an applicant proposed land use amendment and a Staff Alternative. The purpose of the General Plan Amendment (GPA) traffic analysis is to assess the long-range impacts of the proposed land use amendment (both applicant proposed and Staff Alternative) to the Meridian Avenue General Plan site on the citywide transportation system. The potential traffic impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP). In addition, a near term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP will be required once a development application is submitted to the City..

General Plan Amendment Site Description

The project consists of amending the adopted land use designation of the Envision San José 2040 GP for the approximately 11.56-acre site located on the north side of Parkmoor Avenue, between Meridian Avenue and Race Street. The Meridian Avenue GPA site location is presented on Figure 15. This GPA site includes an applicant proposed land use amendment and a Staff Alternative. The adopted GP land use designation for the site is *Industrial Park*, and the proposed amendment (as proposed by both the applicant and the Staff Alternative) involves changing the adopted land use to *Combined Industrial/Commercial*. The difference between the applicant proposed amendment and the Staff Alternative is that the Staff Alternative includes two additional parcels (totaling 0.98 acres), increasing the size of the site to 12.54 acres. The site is currently occupied by office and industrial-use buildings. The proposed land use change for development of the site would complement the immediate and surrounding land uses.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 peak-hour trips to be generated by the subject site due to proposed increases in households or employment would be required to prepare a site-specific GPA traffic analysis. The Meridian Avenue GPA site is located outside of the specific subareas. According to the TDF modeling results, the GP amendment, as proposed by the applicant, would result in 397 fewer jobs on the site. However, the proposed change in land use would result in an additional 128 AM and 260 PM peak-hour trips at the Meridian Avenue GPA site when compared to the current GP land use designation (see Table 15). Additionally, the Staff Alternative amendment would result in 432 fewer jobs on the site and an additional

Figure 15
Meridian Avenue GPA Site Location

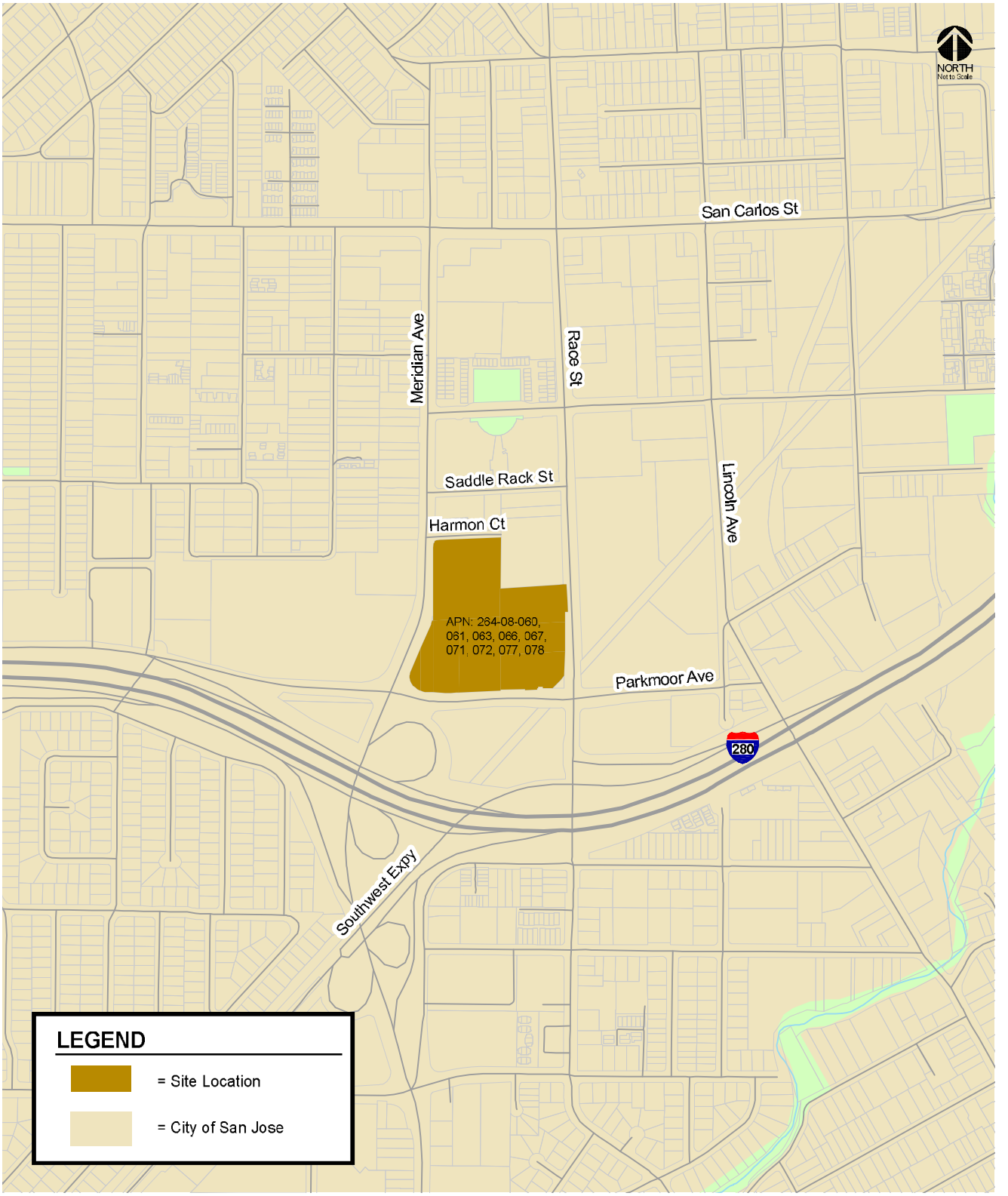


Table 15
Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPA at Meridian Avenue Site

Site Number	Site Name	General Plan (Baseline) [1] TOTHH	General Plan (Baseline) [1] TEMP	General Plan Amendment [2] TOTHH	General Plan Amendment [2] TEMP	Net Land Use Change TOTHH	Net Land Use Change TEMP	Net Peak-Hour Trip Change AM	Net Peak-Hour Trip Change PM
	Applicant Proposed GPA								
5	GP-18-002 [Meridian Avenue]	1,656	2,811	1,656	2,414	0	-397	128	**260**
	Staff Alternative								
5	GP-18-002 [Meridian Avenue] Staff Alt	1,656	2,811	1,656	2,379	0	-432	140	**284**

Notes: TOTHH = total number of households; TEMP = total number of jobs.
[1] Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP). The buildout of the 2040 GP represents baseline conditions.
[2] Total number of households and jobs as proposed by the applicant and Staff Alternative GP Amendments.
Outlined indicates GPA that results in an increase in peak hour trips greater than 250 trips and requires site-specific GPA traffic analysis.
Sources: City of San Jose Planning Department, June 2018
City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

140 AM and 284 PM peak-hour trips at the Meridian Avenue GPA site when compared to the current GP land use designation (see Table 15). Although commercial land uses generally have fewer jobs per 1,000 square feet of space when compared to industrial uses, commercial uses result in more trips than industrial land use due to patrons of the commercial uses. Thus, replacing some of the industrial land use with commercial land use may result in a reduction in jobs but still result in an increase in trips to the site. Therefore, a site-specific GPA traffic analysis is required for the both the applicant proposed and Staff Alternative land use amendments. The GPA (both the applicant and Staff Alternative) does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

The Staff Alternative proposal would result in approximately 35 fewer jobs on the site, compared to the applicant proposed amendment. The 35-job difference between the proposed amendments for this site would have a negligible effect on long-range impacts. Therefore, it can be assumed that both the applicant proposed and the Staff Alternative land use amendments for the Meridian Avenue GP site would have the same long-range impacts on the citywide transportation system. For this reason, only an assessment of the applicant proposed Berryessa Road GPA is presented within this report.

Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, impacts to roadways in adjacent jurisdictions, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses (i.e., including the adopted Four-Year GP Review Land Use adjustments) is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions includes the citywide roadway network to reflect the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendment for the Meridian Avenue GP site. Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the Current 2040 GP Conditions to determine any long-range traffic impacts.

Existing Conditions

This section describes the existing conditions for all of the major transportation facilities near the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the site is provided via I-280 and SR 87. Local access to the site is provided by Meridian Avenue, Race Street, San Carlos Street, and Parkmoor Avenue. These facilities are described below.

Interstate 280 (I-280) is generally an eight-lane freeway near Downtown San José with auxiliary lanes between some interchanges. It extends from US 101 in San José to I-80 in San Francisco. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. I-280 provides access to the site via partial interchanges at Meridian Avenue (ramps from north and ramps to south), Race Street (ramp from south), and Parkmoor Avenue (ramp to north).

State Route 87 (SR 87) connects from SR-85 in south San José to US-101 near the San José International Airport. It is generally a six-lane freeway (two mixed-flow lanes plus one HOV lane in each direction) with auxiliary lanes near the I-280 interchange. Access to the site from SR 87 is provided via an interchange with I-280.

Meridian Avenue is a four-lane north-south arterial that runs from Camden Avenue to the south to San Carlos Street to the north, at which point it transitions to a two-lane road until its terminus at Park Avenue. With southbound off- and on-ramps at I-280, Meridian Avenue provides regional access to the site. Additionally, Meridian Avenue is the western site boundary, providing direct access to the site.

Race Street is a north-south road that runs from Fruitdale Avenue to the south to The Alameda to the north. The segment between Saddle Rack Street and the I-280 off-ramp consists of a four-lane roadway while the segments north of Saddle Rack Street and south of the I-280 off-ramp consist of two lanes. With a northbound off-ramp at I-280, Race Street provides regional access to the site. Additionally, Race Street is the eastern site boundary, providing direct access to the site.

San Carlos Street is a four-lane east-west arterial that runs from Fourth Street to Bascom Avenue, just east of I-880, at which point it becomes Stevens Creek Boulevard. Access to the site is provided via Meridian Avenue and Race Street.

Parkmoor Avenue is a four-lane east-west roadway that runs from Lincoln Avenue to the east to Scott Street to the west. With a northbound on-ramp at I-280, Race Street provides regional access to the site. Parkmoor Avenue is the southern site boundary, providing direct access to the site.

Existing Bicycle and Pedestrian Facilities

There are several bicycle facilities near the Meridian Avenue GP site. As defined by the California Department of Transportation (Caltrans), bicycle facilities include Class I bikeways (defined as bike paths off street, which is shared with pedestrians and excludes general motor vehicle traffic), Class II bikeways (defined as striped bike lanes on street), Class III bike routes (defined as roads with bike route signage where bicyclists share the road with motor vehicles), and Class IV cycle tracks (bike lanes physically separated from vehicle traffic by a vertical element. Bicyclists are allowed to ride on any roadway, even if there is no bicycle facility present, with the exception of limited access highways.

Class II striped bike lanes are provided on the following roadways near the site:

- Race Street – Between San Carlos Street and Parkmoor Avenue
- Parkmoor Avenue – Between Race Street and I-280 Pedestrian/Bike Crossing
- Lincoln Avenue – South of San Carlos Street
- Auzerais Avenue – Between Sunol Street and Bird Avenue

Class III bike routes are provided on the following roadways:

- Douglas Court and Scott Street – West of Meridian Avenue
- Auzerais Avenue – Between Race Street and Sunol Street
- Lincoln Avenue – Between Park Avenue and San Carlos Street

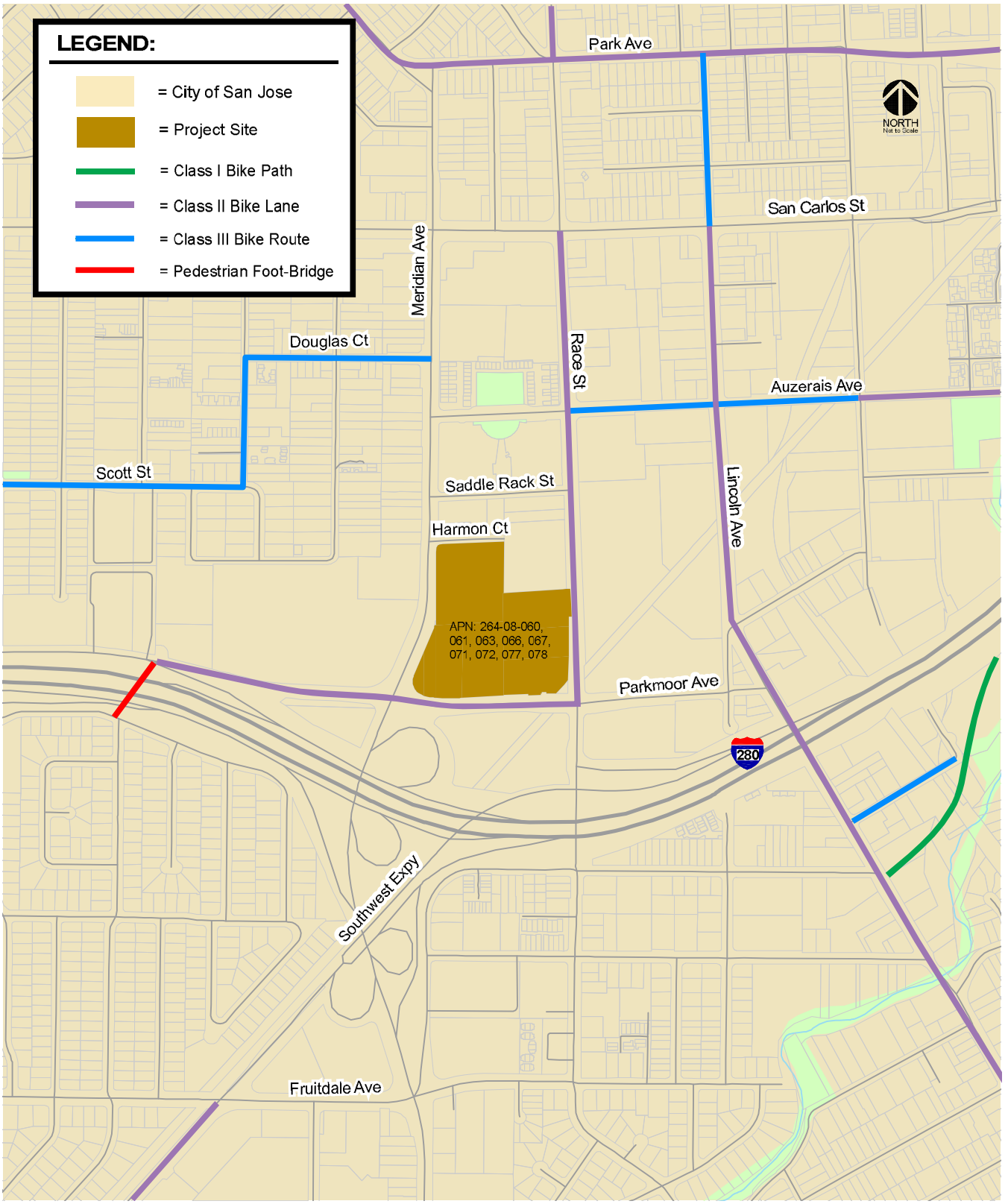
The Los Gatos Creek Trail is a City of San José and Santa Clara County Class I bicycle facility (off-street bike path) that runs from Lexington Reservoir south of Los Gatos to Meridian Avenue in San José. A separate portion of the trail runs between Lonus Street and Dupont Street, alongside Los Gatos Creek in San José. The bike path is also available for use by pedestrians. The existing bicycles facilities are shown on Figure 16.

In addition, the City of San José bicycle master plan*, San José Bike Plan 2020*, provides policies and improvements to bicycle facilities to improve the use of bicycles in the City. It includes an inventory of existing bicycle facilities and identifies locations for enhancement of existing facilities by expansion and or establishing potential connections.

Pedestrian facilities near the project consist primarily of sidewalks along the streets in most residential and commercial areas, as well as the aforementioned bike/pedestrian path. Sidewalks are found along virtually all previously described local roadways in the study area, with a few exceptions, and along the local residential streets and collectors near the site. Within the study area, there are no sidewalks along the following roadways:

- The south side of Parkmoor Avenue, west of Meridian Avenue
- The south side of Saddle Rack Street, along its entire extent.

Figure 16
Existing Bicycle Facilities (Meridian Avenue)



Existing Transit Services

Existing transit services to the study area are provided by the VTA. The VTA transit services are described below and shown on Figure 17.

VTA Bus Services

Local Route 23 runs from De Anza College to Alum Rock Transit Center via Stevens Creek Boulevard and San Carlos Street and operates from 5:20 AM to 1:00 AM with 10-minute headways during the weekday commute periods. The nearest bus stop to the Meridian Avenue site served by Route 23 is located along San Carlos Street east of Meridian Avenue.

Local Route 63 runs from Almaden Expressway/Camden Avenue to San José State University via Meridian Avenue and operates from 6:15 AM to 10:20 PM with 30-minute headways during the weekday commute periods. The nearest bus stops to the Meridian Avenue site served by Route 63 are located along Meridian Avenue north of Parkmoor Avenue and south of Harmon Avenue.

Local Route 65 runs from Kooser Road to Hedding Street/13th Street via Parkmoor Avenue and operates from 5:45 AM to 8:00 PM with 45- to 60-minute headways during the weekday commute periods. The nearest bus stops to the Meridian Avenue site served by Route 65 are located along Parkmoor Avenue, east of Meridian Avenue, east of Race Street, and west of Race Street.

Local Route 81 runs from Moffett Field/Ames Center to San José State University via San Carlos Street and operates from 6:15 AM to 9:00 PM with 15- to 30-minute headways during the weekday commute periods. The nearest bus stop to the Meridian Avenue site served by Route 81 is located along San Carlos Street, east of Meridian Avenue.

Limited Route 323 runs from Downtown San José to De Anza College via San Carlos Street and operates from 6:15 AM to 10:40 PM with 15-minute headways during the weekday commute periods. The nearest bus stop to the Meridian Avenue site served by Route 323 is located along San Carlos Street, east of Meridian Avenue.

Express Route 103 runs from Eastridge Transit Center to Palo Alto via Meridian Avenue and operates four westbound trips during morning commute hours and four eastbound trips during afternoon commute hours. The nearest bus stop to the Meridian Avenue site served by Route 103 is located east of the Southwest Expressway/Fruitdale Avenue intersection.

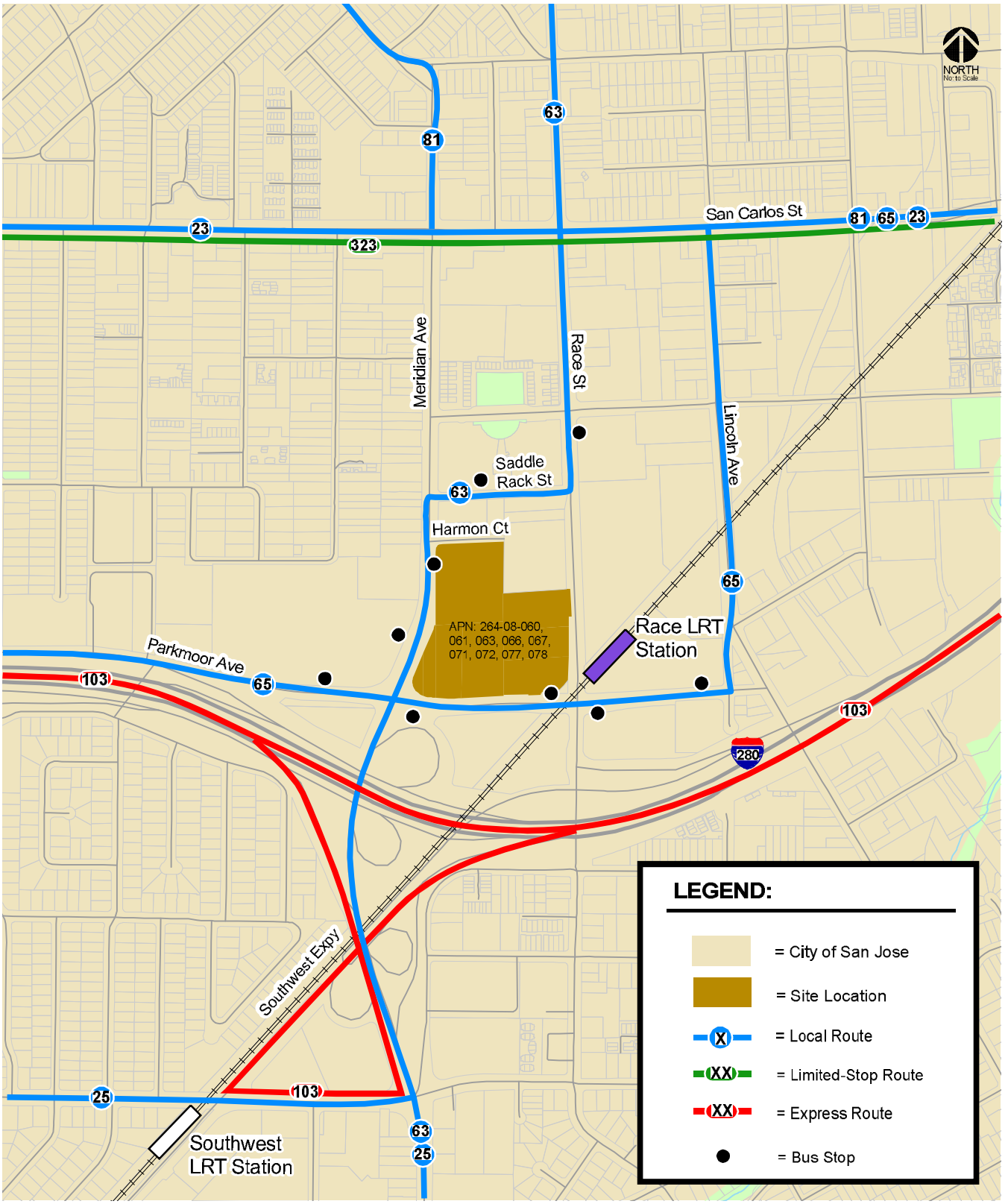
Light Rail Transit (LRT) Service

The project site is located adjacent to the Race LRT station. LRT service at the Race LRT station is provided by the Mountain View-Winchester LRT line, which operates nearly 24 hours a day (4:40 AM to 12:45 AM) with 15-minute headways during peak commute and midday hours. The Mountain View-Winchester LRT line provides service from the Winchester station in Campbell, through Downtown San José to north San José where it curves west and operates along the Tasman Corridor, bends north and runs along Java Drive and Mathilda Avenue, and ultimately terminates in Downtown Mountain View adjacent to the Mountain View Caltrain Station.

General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed Meridian Avenue site GPA were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

Figure 17
Existing Transit Services (Meridian Avenue)



Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to calculate daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendment is considered a significant impact.

As shown in Table 16, the citywide daily VMT would increase slightly due to the proposed land use amendment when compared to the current GP. However, the VMT per service population would not change when compared to the current GP. The small increase in daily VMT is due to the shifting of land use/growth within different parts of the City. However, the increase in daily VMT is too small to have a measurable effect on the citywide VMT per service population. Therefore, the proposed Meridian Avenue GPA would result in a *less than significant* impact on the citywide daily VMT per service population.

Table 16
Daily Vehicle Miles Traveled Per Service Population (Meridian Avenue)

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,046,059	28,056,485
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.57	13.65	13.65
Increase in VMT/Service Population over General Plan Conditions			***0.00***
Significant Impact?			**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Service Population = Residents + Jobs
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan

Amendments (Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.

Table 17 summarizes the citywide journey-to-work mode share analysis results. When compared to the current GP, the percentage of journey-to-work drive alone trips would not change as a result of the proposed land use amendment. Approximately 72% of the commuters would drive single occupancy vehicles to travel to and from work under the current GP and the current GP with the proposed land use amendment. Therefore, the proposed Meridian Avenue GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

Table 17
Journey-to-Work Mode Share (Meridian Avenue)

Mode	Base Year (2015)		2040 General Plan (Baseline)		2040 General Plan Plus GPA	
	Trips	%	Trips	%	Trips	%
Drive Alone	753,264	79.7%	1,098,198	72.0%	1,098,251	72.0%
Carpool 2	85,496	9.0%	138,716	9.1%	138,707	9.1%
Carpool 3+	28,526	3.0%	55,275	3.6%	55,137	3.6%
Transit	48,181	5.1%	177,546	11.6%	177,702	11.7%
Bicycle	14,120	1.5%	26,119	1.7%	26,066	1.7%
Walk	15,666	1.7%	28,839	1.9%	28,826	1.9%
Increase in Drive Alone Percentage over General Plan Conditions						0.0%
Significant Impact?						**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 18 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in travel speeds of 0.2 mph or less (or a change of 1% or less) on six corridors due to the proposed land use amendment. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the proposed Meridian Avenue GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Table 18
AM Peak Hour Vehicle Speeds (mph) for San José Transit Priority Corridors (Meridian Avenue)

Transit Priority Corridor	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA	% Change (GPplusGPA - GP) / GP	Absolute Change (GPplusGPA - GP)
2nd St from San Carlos St to St. James St	16.6	15.7	15.6	-0.6%	-0.1
Alum Rock Av from Capitol Av to US 101	21.3	16.6	16.6	-0.1%	0.0
Camden Av from SR 17 to Meridian Av	23.1	18.1	18.2	0.3%	0.1
Capitol Av from S. Milpitas Bl to Capitol Expwy	27.1	22.8	22.7	-0.5%	-0.1
Capitol Expwy from Capitol Av to Meridian Av	33.0	26.9	27.0	0.0%	0.0
E. Santa Clara St from US 101 to Delmas Av	20.4	16.2	16.0	-1.0%	-0.2
Meridian Av from Park Av to Blossom Hill Rd	24.9	20.9	20.8	-0.2%	0.0
Monterey Rd from Keyes St to Metcalf Rd	27.4	19.2	19.5	1.3%	0.3
N. 1st St from SR 237 to Keyes St	21.3	13.9	13.7	-0.7%	-0.1
San Carlos St from Bascom Av to SR 87	24.8	20.8	20.7	-0.4%	-0.1
Stevens Creek Bl from Bascom Av to Tantau Av	24.3	18.8	18.7	-0.2%	0.0
Tasman Dr from Lick Mill Bl to McCarthy Bl	22.7	13.8	13.7	-0.5%	-0.1
The Alameda from Alameda Wy to Delmas Av	20.5	14.3	14.4	0.1%	0.0
W. San Carlos St from SR 87 to 2nd St	20.0	19.3	19.2	-0.2%	0.0

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Adjacent Jurisdictions

The San José GP TDF model was used to calculate the number of lane miles of street segments with V/C ratios of 1.0 or greater during the peak 4-hour AM period within adjacent jurisdictions.

The effect of the proposed land use adjustments is evaluated based on the percentage of traffic that would be added to the deficient roadways. As defined in the City of San José *Transportation Analysis*

Handbook (Thresholds of Significance for General Plan Amendments (Table 11), a deficient roadway segment in an adjacent jurisdiction is attributed to San José when trips originating from residents and jobs within San José equal 10 percent or more on the deficient segment. An impact to an adjacent jurisdiction is considered significant when 25% or more of total deficient lane miles are attributable to the City of San José. The 25% threshold represents what would be a noticeable change in traffic.

Table 19 summarizes the City of San José's traffic impacts on the roadway segments within adjacent jurisdictions. City of San José traffic would significantly impact roadway segments within the same 13 adjacent jurisdictions under both the current GP and the current GP plus proposed land use amendment conditions. With the proposed land use amendment, the percentage of deficient lane miles attributable to the City would decrease by 1% at one of the 13 impacted jurisdictions and would remain unchanged at the remaining 12 impacted jurisdictions, when compared to the current GP. Additionally, San José traffic contribution to Los Altos roadway segments would increase from 17% under the current GP to 23% under the proposed land use amendment. However, the Los Altos roadway segments would not be significantly impacted under the current General Plan conditions or the proposed GPA conditions since the percentage of deficient lane miles attributable to San José would continue to be less than the 25% threshold. The proposed land use amendment would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Therefore, the proposed Meridian Avenue GPA would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the Meridian Avenue GP site develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.

Table 19
AM 4-Hour Traffic Impacts in Adjacent Jurisdictions (Meridian Avenue)

City	Base Year (2015)			2040 General Plan (Baseline)			2040 General Plan Plus GPA		
	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose
Campbell	0.12	0.12	100%	1.15	1.15	100%	1.15	1.15	100%
Cupertino	1.67	1.19	72%	2.60	2.23	86%	2.60	2.23	86%
Gilroy	0.34	0.34	100%	0.00	0.00	0%	0.00	0.00	0%
Los Altos	0.50	0.00	0%	1.49	0.25	17%	1.28	0.30	23%
Los Altos Hills	0.38	0.13	35%	2.51	1.95	78%	2.51	1.95	78%
Los Gatos	0.22	0.22	100%	1.34	1.34	100%	1.34	1.34	100%
Milpitas	0.39	0.39	100%	5.54	5.54	100%	5.54	5.54	100%
Monte Sereno	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%
Morgan Hill	0.00	0.00	0%	0.24	0.24	100%	0.24	0.24	100%
Mountain View	0.39	0.28	71%	1.60	1.48	93%	1.40	1.29	92%
Palo Alto	0.88	0.31	35%	2.42	0.76	31%	2.42	0.76	31%
Santa Clara	0.00	0.00	0%	0.60	0.60	100%	0.60	0.60	100%
Saratoga	0.00	0.00	0%	0.63	0.63	100%	0.63	0.63	100%
Sunnyvale	0.81	0.81	100%	0.53	0.48	90%	0.53	0.48	90%
Caltrans Facilities	5,743.69	4,433.43	77%	5,856.67	4,783.14	82%	5,794.16	4,778.32	82%
Santa Clara County Expressways	0.62	0.51	81%	5.97	5.95	100%	5.97	5.95	100%

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
1. Total deficient lane miles are total lane miles of street segments with V/C ratios of 1.0 or greater.
2. A deficient roadway segment is attributed to San Jose when trips from the City are 10% or more on the deficient segment.
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

7. Union Avenue - Staff Alternative (Site-Specific GPA Traffic Analysis)

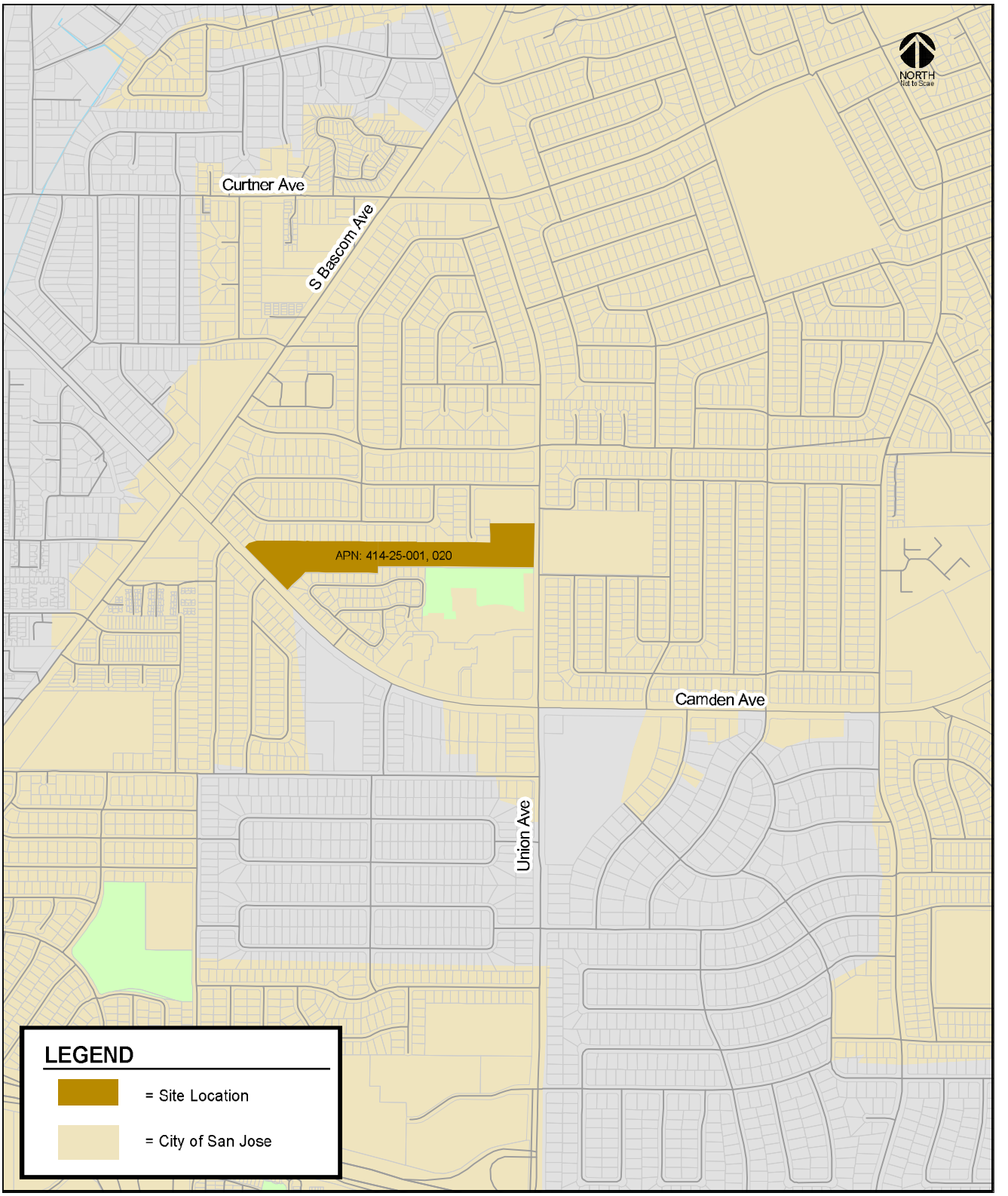
This report presents the results of the long-range site-specific traffic impact analysis for the proposed Union Avenue General Plan Amendment (GP18-004). The Union Avenue General Plan Amendment includes an applicant proposed land use amendment and a Staff Alternative. The purpose of the General Plan Amendment (GPA) traffic analysis is to assess the long-range impacts of the proposed land use amendment (both applicant proposed and Staff Alternative) to the Union Avenue General Plan site on the citywide transportation system. The potential traffic impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP). In addition, a near term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP will be required once a development application is submitted to the City.

General Plan Amendment Site Description

The project consists of amending the adopted land use designation of the Envision San José 2040 GP for the approximately 12.12-acre site bounded by Camden Avenue and Union Avenue. The Union Avenue GPA site location is presented on Figure 18. This GPA includes an applicant proposed land use amendment and a Staff Alternative. The adopted GP land use designation for the site is *Public/Quasi-Public*, and the proposed amendment, as proposed by the applicant, involves changing the adopted land use to *Residential Neighborhood* on 6 acres of the site and *Combined Industrial/Commercial* on 3.28 acres of the site, while the Staff Alternative land use amendment involves changing the adopted land use to *Combined Industrial/Commercial* on 9.28 acres of the site. The site is currently occupied by the Camden Union High School District office and community day school. The proposed land use change for development of the site would complement the immediate and surrounding land uses.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 peak-hour trips to be generated by the subject site due to proposed increases in households or employment would be required to prepare a site-specific GPA traffic analysis. The Union Avenue GPA site is located outside of the specific subareas. According to the TDF modeling results, the proposed GP amendment, as proposed by the applicant, would result in 36

Figure 18
Union Avenue GPA Site Location



additional households and 46 additional jobs on the site, and an additional 55 AM and 73 PM peak-hour trips at the Union Avenue GPA site, when compared to the current GP land use designation (see Table 20). Additionally, the Staff Alternative amendment would result in 458 additional jobs on the site and an additional 289 AM and 449 PM peak-hour trips at the Union Avenue GPA site, when compared to the current GP land use designation (see Table 20). Therefore, a site-specific GPA traffic analysis is required for the Staff Alternative land use amendment only. The GPA (both the applicant and Staff Alternative) does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

Table 20
Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPAs at Union Avenue Site

Site Number	Site Name	General Plan (Baseline) [1]		General Plan Amendment [2]		Net Land Use Change		Net Peak-Hour Trip Change	
		TOTHH	TEMP	TOTHH	TEMP	TOTHH	TEMP	AM	PM
	Applicant Proposed GPA								
6	GP-18-004 [Union Avenue]	390	1,446	426	1,492	36	46	55	73
	Staff Alternative								
6	GP-18-004 [Union Avenue]	390	1,446	390	1,904	0	458	**289**	**449**

Notes: TOTHH = total number of households; TEMP = total number of jobs.
[1] Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP). The buildout of the 2040 GP represents baseline conditions.
[2] Total number of households and jobs as proposed by the applicant and Staff Alternative GP Amendments.
Outlined indicates GPA that results in an increase in peak hour trips greater than 250 trips and requires site-specific GPA traffic analysis.
Sources: City of San Jose Planning Department, June 2018
City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, impacts to roadways in adjacent jurisdictions, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.
- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses (i.e., including the adopted Four-Year GP Review Land Use adjustments) is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions includes the citywide roadway network to reflect the current roadway network as well as all transportation system improvements as identified in the current GP.
- **Staff Alternative 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed Staff Alternative land use amendment for the Union Avenue GP site.

Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the Current 2040 GP Conditions to determine any long-range traffic impacts.

Existing Conditions

This section describes the existing conditions for all of the major transportation facilities near the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the site is provided via SR 85 and SR 17. Local access to the site is provided by Union Avenue, Camden Avenue, Bascom Avenue, and Hillsdale Avenue. These facilities are described below.

State Route 85 (SR 85) is a six-lane freeway (two mixed-flow lanes and one high occupancy vehicle (HOV) lane in each direction) in the vicinity of the site. It extends from its starting point at US-101 in South San José westward and northward to Mountain View, where it ends as it again merges with US-101. Access to the site is provided via its interchange with Union Avenue.

State Route 17 (SR 17) is a six-lane freeway in the vicinity of the site. It extends south to Santa Cruz and north to I-280 in San José, at which point it makes a transition into I-880 to Oakland. Access to the site from SR-17 is provided via its interchange with San Tomas Expressway/Camden Avenue.

Union Avenue is a two- to four-lane north-south roadway that runs along the eastern project site's boundary. It extends from Campbell Avenue in Campbell to Los Gatos, where it terminates at Blossom Hill Road. Union Avenue provides direct access to the site.

Camden Avenue is a four- to six-lane northwesterly-southeasterly roadway that runs along the western project site's boundary. It extends from Almaden Expressway in South San José north-eastward to SR 17 in Campbell, at which point it transitions into San Tomas Expressway. Camden Avenue consists of three travel lanes in each direction in the vicinity of the site. Camden Avenue provides direct access to the site.

Bascom Avenue is a six-lane arterial that is aligned in a north-south orientation. Bascom Avenue begins at SR-85, where it transitions from Los Gatos Boulevard, and runs north to I-880. Access to the site from Bascom Avenue is provided via Camden and Union Avenues.

Hillsdale Avenue is a six-lane east-west roadway that extends from its intersection with Camden Avenue eastward to Almaden Expressway, at which point it transitions into Capitol Expressway. Access to the site from Hillsdale Avenue is provided via Camden Avenue.

Existing Bicycle and Pedestrian Facilities

There are several bicycle facilities near the Union Avenue GP site. As defined by the California Department of Transportation (Caltrans), bicycle facilities include Class I bikeways (defined as bike paths off street, which is shared with pedestrians and excludes general motor vehicle traffic), Class II bikeways (defined as striped bike lanes on street), Class III bike routes (defined as roads with bike route signage where bicyclists share the road with motor vehicles), and Class IV cycle tracks (bike lanes physically separated from vehicle traffic by a vertical element. Bicyclists are allowed to ride on any roadway, even if there is no bicycle facility present, with the exception of limited access highways.

Class II striped bike lanes are provided on the following roadways near the site:

- Union Avenue – Between south of SR 85 and Bascom Avenue
- Foxworthy Avenue – Between Bascom Avenue and Lantz Avenue

- Leigh Avenue – Between Blossom Hill Road and Curtner Avenue
- Curtner Avenue – East of Bascom Avenue

The Los Gatos Creek Trail is a City of San José and Santa Clara County Class I bicycle facility (off-street bike path) that runs from Lexington Reservoir south of Los Gatos to Meridian Avenue in San José. The trail can be accessed from the San Tomas Expressway and Winchester Boulevard area. The bike path is also available for use by pedestrians. The existing bicycles facilities are shown on Figure 19.

In addition, the City of San José bicycle master plan, *San José Bike Plan 2020*, provides policies and improvements to bicycle facilities to improve the use of bicycles in the City. It includes an inventory of existing bicycle facilities and identifies locations for enhancement of existing facilities by expansion and or establishing potential connections.

Pedestrian facilities near the project consist primarily of sidewalks along the streets in most residential and commercial areas, as well as the aforementioned bike/pedestrian path. Sidewalks are found along virtually all previously described local roadways in the study area and along the local residential streets and collectors near the site with the exception of short intermittent segments of Union Avenue, where sidewalks are missing along one side of the street.

Existing Transit Services

Existing transit services to the study area are provided by the VTA. The VTA transit services are described below and shown on Figure 20.

VTA Bus Services

Local Route 37 runs from West Valley College to Capitol Light Rail Station via Camden Avenue and operates from 6:30 AM to 10:00 PM with 30-minute headways during the weekday commute periods. The nearest bus stop to the Union Avenue site served by Route 37 is located at the Bascom Avenue/Camden Avenue intersection.

Local Route 62 runs from Good Samaritan Hospital to Sierra Road and Piedmont Road via Union Avenue and operates from 5:30 AM to 11:00 PM with 30-minute headways during the weekday commute periods. The nearest bus stop to the Union Avenue site served by Route 62 is located along Union Avenue, north of Camden Avenue.

Limited Route 328 provides service between Almaden Expressway/Camden Avenue and Lockheed Martin/Moffett Industrial Park via Camden Avenue, with two scheduled trips in the northbound direction during the weekday AM commute period and two scheduled trips in the southbound direction during the weekday PM commute period. The nearest bus stop to the Union Avenue site served by Route 328 is located at the Bascom Avenue/Camden Avenue intersection.

Limited Route 330 provides service between Almaden Expressway/Camden Avenue and Tasman Drive via Camden Avenue, with four scheduled trips in the northbound direction during the weekday AM commute period and four scheduled trips in the southbound direction during the weekday PM commute period. The nearest bus stop to the Union Avenue site served by Route 330 is located at the Bascom Avenue/Camden Avenue intersection.

Express Route 101 provides service between Camden Avenue/SR 85 and Palo Alto via Camden Avenue, with two scheduled trips in the northbound direction during the weekday AM commute period and two scheduled trips in the southbound direction during the weekday PM commute period. The nearest bus stop to the Union Avenue site served by Route 101 is located at the Bascom Avenue/Camden Avenue intersection.

Figure 19
Existing Bicycle Facilities (Union Avenue)

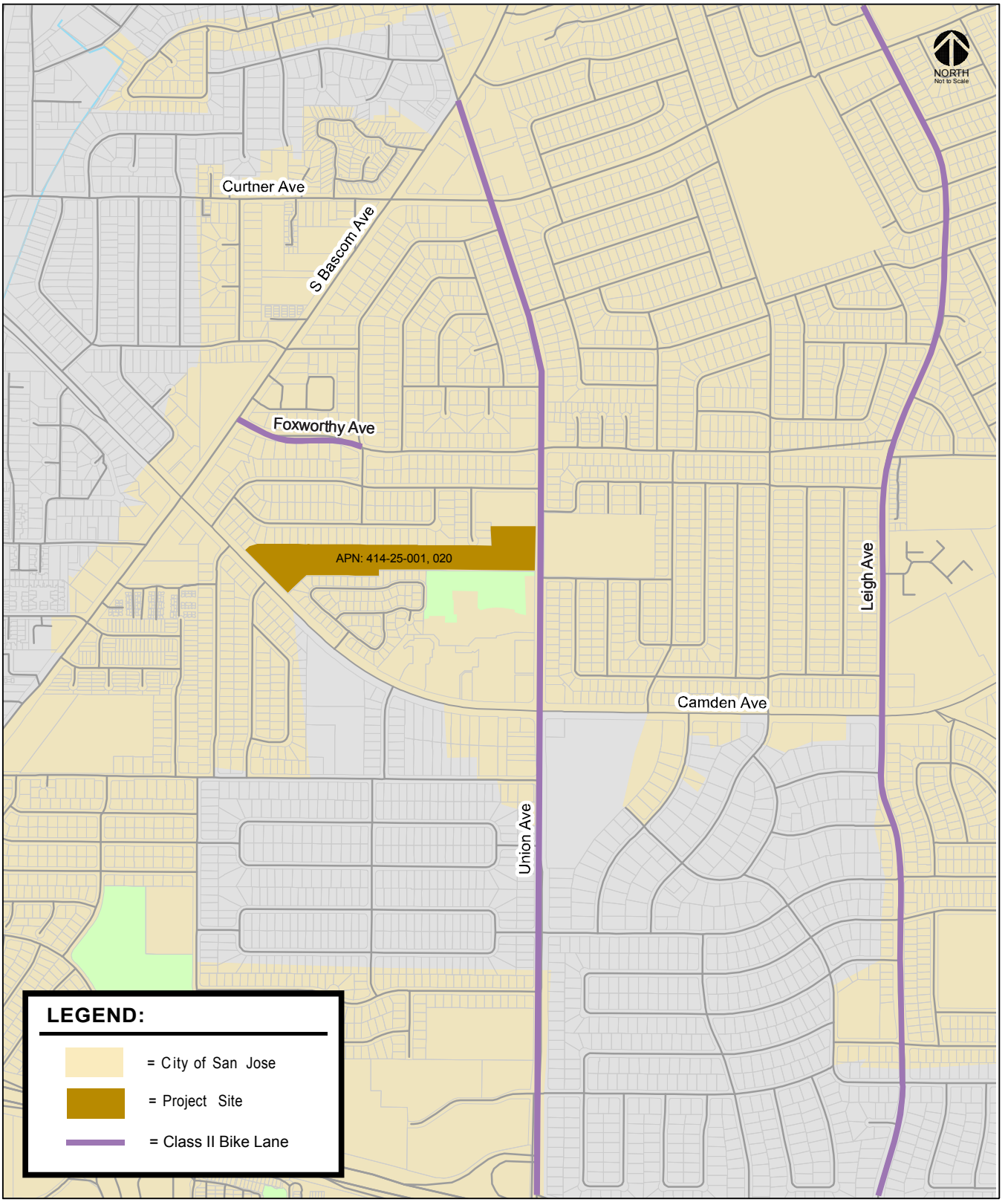
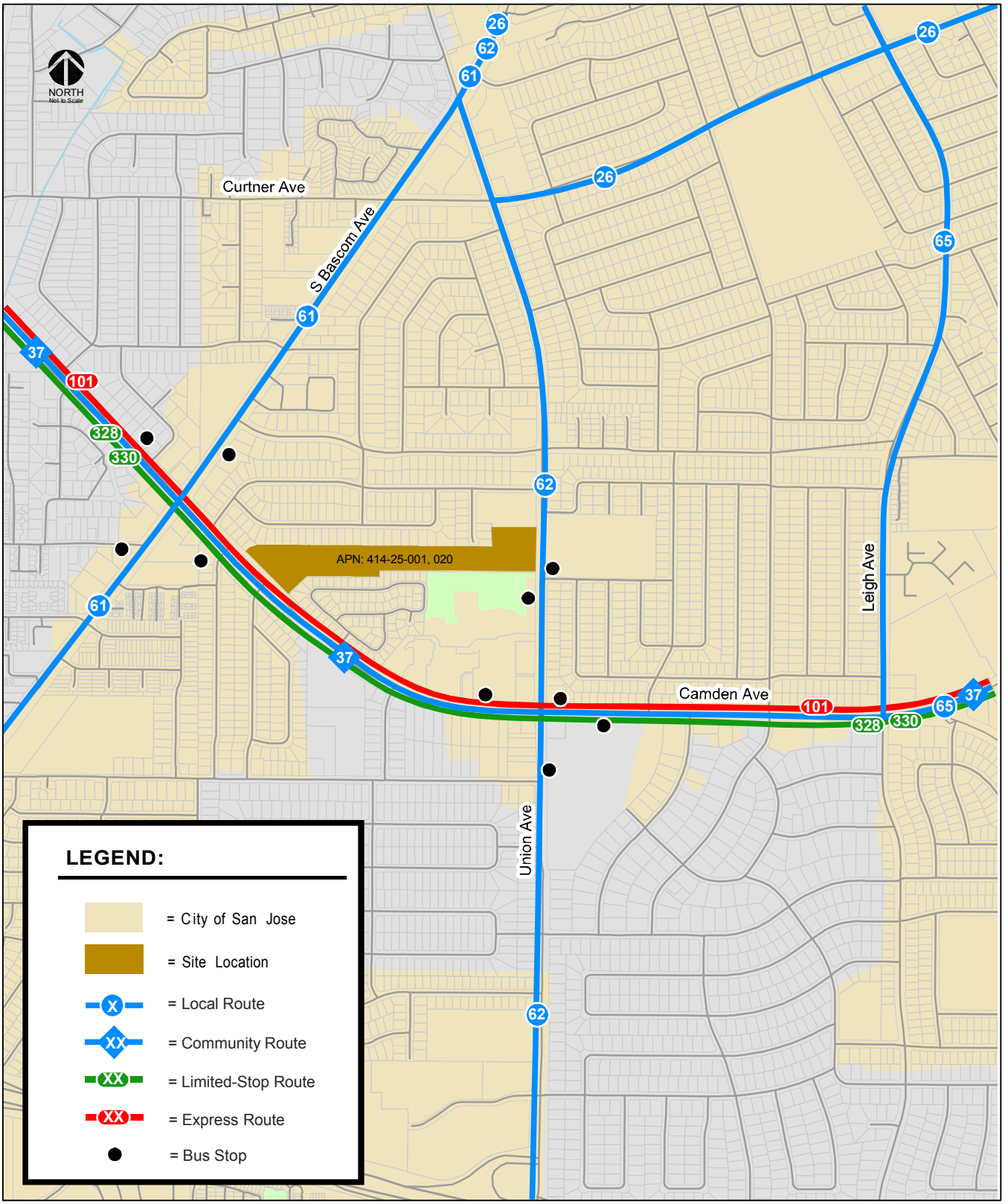


Figure 20
Existing Transit Services (Union Avenue)



General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed Union Avenue site Staff Alternative GPA were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to calculate daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in VMT per service population over the current GP due to the proposed land use amendment is considered a significant impact.

As shown in Table 21, the citywide daily VMT would increase slightly due to the Staff Alternative land use amendment when compared to the current GP. However, the VMT per service population would not change when compared to the current GP. The small increase in daily VMT is due to the shifting of land use/growth within different parts of the City. However, the increase in daily VMT is too small to have a measurable effect on the citywide VMT per service population. Therefore, the Staff Alternative Union Avenue GPA would result in a *less than significant* impact on the citywide daily VMT per service population.

Table 21
Daily Vehicle Miles Traveled Per Service Population (Union Avenue – Staff Alternative)

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,046,059	28,046,167
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.6	13.65	13.65
Increase in VMT/Service Population over General Plan Conditions			***0.0***
Significant Impact?			**No**

Note:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment - Staff Alternative
Service Population = Residents + Jobs
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.

Table 22 summarizes the citywide journey-to-work mode share analysis results. When compared to the current GP, the percentage of journey-to-work drive alone trips would not change as a result of the Staff Alternative land use amendment. Approximately 72% of the commuters would drive single occupancy vehicles to travel to and from work under the current GP and the current GP with the Staff Alternative land use amendment. Therefore, the Staff Alternative Union Avenue GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

Table 22
Journey-to-Work Mode Share (Union Avenue – Staff Alternative)

	Base Year (2015)		2040 General Plan (Baseline)		2040 General Plan Plus GPA	
Mode	**Trips**	**%**	**Trips**	**%**	**Trips**	**%**
Drive Alone	753,264	79.7%	1,098,198	72.0%	1,098,102	72.0%
Carpool 2	85,496	9.0%	138,716	9.1%	138,705	9.1%
Carpool 3+	28,526	3.0%	55,275	3.6%	55,267	3.6%
Transit	48,181	5.1%	177,546	11.6%	177,554	11.6%
Bicycle	14,120	1.5%	26,119	1.7%	26,112	1.7%
Walk	15,666	1.7%	28,839	1.9%	28,847	1.9%
Increase in Drive Alone Percentage over General Plan Conditions						0.0%
Significant Impact?						**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment - Staff Alternative
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing

the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 23 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the Staff Alternative land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in travel speeds of 0.3 mph or less (or a change of 1.5% or less) on 11 corridors due to the Staff Alternative land use amendment. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the Staff Alternative Union Avenue GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Table 23
AM Peak Hour Vehicle Speeds (mph) for San José Transit Priority Corridors (Union Avenue – Staff Alternative)

Transit Priority Corridor	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA	% Change (GPplusGPA - GP) / GP	Absolute Change (GPplusGPA - GP)
2nd St from San Carlos St to St. James St	16.6	15.7	15.5	-1.3%	-0.2
Alum Rock Av from Capitol Av to US 101	21.3	16.6	16.4	-1.5%	-0.2
Camden Av from SR 17 to Meridian Av	23.1	18.1	18.0	-1.0%	-0.2
Capitol Av from S. Milpitas Bl to Capitol Expwy	27.1	22.8	22.5	-1.1%	-0.3
Capitol Expwy from Capitol Av to Meridian Av	33.0	26.9	26.9	-0.1%	0.0
E. Santa Clara St from US 101 to Delmas Av	20.4	16.2	16.0	-1.3%	-0.2
Meridian Av from Park Av to Blossom Hill Rd	24.9	20.9	20.8	-0.3%	-0.1
Monterey Rd from Keyes St to Metcalf Rd	27.4	19.2	19.5	1.4%	0.3
N. 1st St from SR 237 to Keyes St	21.3	13.9	13.7	-1.2%	-0.2
San Carlos St from Bascom Av to SR 87	24.8	20.8	20.6	-0.7%	-0.2
Stevens Creek Bl from Bascom Av to Tantau Av	24.3	18.8	18.6	-0.7%	-0.1
Tasman Dr from Lick Mill Bl to McCarthy Bl	22.7	13.8	13.8	0.0%	0.0
The Alameda from Alameda Wy to Delmas Av	20.5	14.3	14.2	-1.0%	-0.1
W. San Carlos St from SR 87 to 2nd St	20.0	19.3	19.0	-1.3%	-0.3

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment - Staff Alternative
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Adjacent Jurisdictions

The San José GP TDF model was used to calculate the number of lane miles of street segments with V/C ratios of 1.0 or greater during the peak 4-hour AM period within adjacent jurisdictions.

The effect of the proposed land use adjustments is evaluated based on the percentage of traffic that would be added to the deficient roadways. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), a deficient roadway segment in an adjacent jurisdiction is attributed to San José when trips originating from residents and jobs within San José equal 10 percent or more on the deficient segment. An impact to an adjacent jurisdiction is considered significant when 25% or more of total deficient lane miles are attributable to the City of San José. The 25% threshold represents what would be a noticeable change in traffic.

Table 24 summarizes the City of San José's traffic impacts on the roadway segments within adjacent jurisdictions. City of San José traffic would significantly impact roadway segments within the same 13 adjacent jurisdictions under both the current GP and the current GP plus Staff Alternative land use amendment conditions. With the Staff Alternative land use amendment, the percentage of deficient lane miles attributable to the City would increase by 1% at one of the 13 impacted jurisdictions and would remain unchanged at the remaining 12 impacted jurisdictions, when compared to the current GP. Additionally, San José traffic contribution to Los Altos roadway segments would increase from 17% under the current GP to 23% under the Staff Alternative land use amendment. However, the Los Altos roadway segments would not be significantly impacted under the current General Plan conditions or the Staff Alternative GPA conditions since the percentage of deficient lane miles attributable to San José would continue to be less than the 25% threshold. The Staff Alternative land use amendment would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Therefore, the Staff Alternative Union Avenue GPA would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the Union Avenue GP site develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.

Table 24
AM 4-Hour Traffic Impacts in Adjacent Jurisdictions (Union Avenue – Staff Alternative)

City	Base Year (2015)			2040 General Plan (Baseline)			2040 General Plan Plus GPA		
	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose
Campbell	0.12	0.12	100%	1.15	1.15	100%	1.15	1.15	100%
Cupertino	1.67	1.19	72%	2.60	2.23	86%	2.60	2.23	86%
Gilroy	0.34	0.34	100%	0.00	0.00	0%	0.00	0.00	0%
Los Altos	0.50	0.00	0%	1.49	0.25	17%	1.28	0.30	23%
Los Altos Hills	0.38	0.13	35%	2.51	1.95	78%	2.51	1.95	78%
Los Gatos	0.22	0.22	100%	1.34	1.34	100%	1.34	1.34	100%
Milpitas	0.39	0.39	100%	5.54	5.54	100%	5.43	5.43	100%
Monte Sereno	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%
Morgan Hill	0.00	0.00	0%	0.24	0.24	100%	0.24	0.24	100%
Mountain View	0.39	0.28	71%	1.60	1.48	93%	1.60	1.50	94%
Palo Alto	0.88	0.31	35%	2.42	0.76	31%	2.42	0.76	31%
Santa Clara	0.00	0.00	0%	0.60	0.60	100%	0.60	0.60	100%
Saratoga	0.00	0.00	0%	0.63	0.63	100%	0.63	0.63	100%
Sunnyvale	0.81	0.81	100%	0.53	0.48	90%	0.53	0.48	90%
Caltrans Facilities	5,743.69	4,433.43	77%	5,856.67	4,783.14	82%	5,793.19	4,770.60	82%
Santa Clara County Expressways	0.62	0.51	81%	5.97	5.95	100%	6.06	6.04	100%

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment - Staff Alternative
1. Total deficient lane miles are total lane miles of street segments with V/C ratios of 1.0 or greater.
2. A deficient roadway segment is attributed to San Jose when trips from the City are 10% or more on the deficient segment.
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

8.
Lelong Street (Site-Specific GPA Traffic Analysis)

This report presents the results of the long-range site-specific traffic impact analysis for the proposed Lelong Street General Plan Amendment (GP18-005). The purpose of the General Plan Amendment (GPA) traffic analysis is to assess the long-range impacts of the proposed General Plan land use amendment to the Lelong Street site on the citywide transportation system. The potential traffic impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP). In addition, a near term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP will be required once a development application is submitted to the City.

General Plan Amendment Site Description

The project consists of amending the adopted land use designation of the Envision San José 2040 GP for the approximately 4.3-acre site located at the northeast quadrant of the Lelong Street/Alma Avenue intersection. The Lelong Street GPA site location is presented on Figure 21. The adopted General Plan land use designations for the site is *Public/Quasi-Public* and the proposed amendment involves changing the adopted land use to *Urban Residential*. The site is occupied by the Tamien Station VTA and Caltrain parking lots. The proposed land use change for development of the site would complement the immediate and surrounding land uses.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 peak-hour trips to be generated by the subject site due to proposed increases in households or employment would be required to prepare a site-specific GPA traffic analysis. The Lelong Street GPA site is located outside of the specific subareas. According to the TDF modeling results, the proposed amendment at the Lelong Street GP site would result in 266 additional households and 162 additional jobs on the site. The increase in households and jobs would result in an additional 237 AM and 300 PM peak hour trips at the Lelong Street GPA site when compared to the current GP land use designation (see Table 25). Therefore, a site-specific GPA traffic analysis is required for the proposed land use amendment. The GPA does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

Figure 21
Lelong Street GPA Site Location

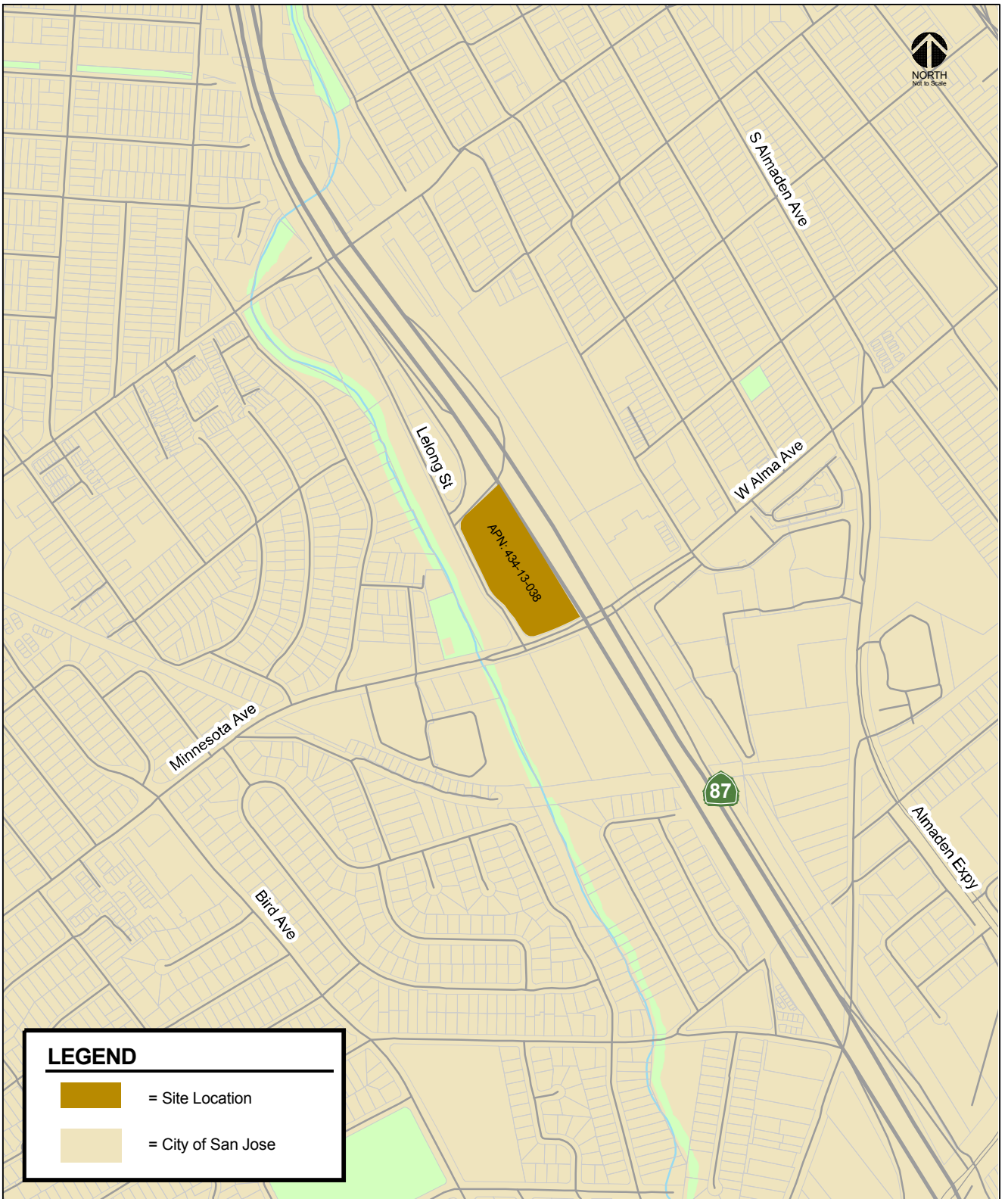


Table 25
Changes in Households, Jobs, and Peak-Hour Trips Due to Proposed GPA at Lelong Street Site

Site Number	Site Name	General Plan (Baseline) [1]		General Plan Amendment [2]		Net Land Use Change		Net Peak-Hour Trip Change	
		TOTHH	TEMP	TOTHH	TEMP	TOTHH	TEMP	AM	PM
7	GP-18-005 [Lelong Street]	447	424	713	586	266	162	237	**300**

Notes: TOTHH = total number of households; TEMP = total number of jobs.
[1] Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP).
The buildout of the 2040 GP represents baseline conditions.
[2] Total number of households and jobs as proposed by the applicant GP Amendment.
Outlined indicates GPA that results in an increase in peak hour trips greater than 250 trips and requires site-specific GPA traffic analysis.
Sources: City of San Jose Planning Department, June 2018
City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, impacts to roadways in adjacent jurisdictions, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.

- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses (i.e., including the adopted Four-Year GP Review Land Use adjustments) is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the citywide roadway network to reflect the current roadway network as well as all transportation system improvements as identified in the current GP.

- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendment for the Lelong Street GP site. Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the Current 2040 GP Conditions to determine any long-range traffic impacts.

Existing Conditions

This section describes the existing conditions for all of the major transportation facilities near the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the project site is provided via SR 87 and I-280. Local access to the site is provided by Lelong Street, Alma Avenue, Willow Street, and Bird Avenue. These facilities are described below.

State Route 87 (SR 87) connects from SR-85 in south San José to US-101 near the San José International Airport. It is generally a six-lane freeway (two mixed-flow lanes plus one HOV lane in each direction) with auxiliary lanes near the I-280 interchange. Access to the site from SR 87 is provided via a southbound off-ramp and a northbound on-ramp at Lelong Street.

Interstate 280 (I-280) is generally an eight-lane freeway near Downtown San José with auxiliary lanes between some interchanges. It extends from US 101 in San José to I-80 in San Francisco. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. I-280 provides access to the site via its interchange with SR 87.

Lelong Street is a two-lane north-south road that runs between Willow Street and Alma Avenue. Lelong Street is the western site boundary, providing direct access to the site.

Alma Avenue is a four-lane east-west collector that runs from Senter Road to the east to Capurso Way to the west, where it transitions to Minnesota Avenue. Access to the site from Alma Avenue is provided via Lelong Street.

Willow Street is a two-lane east-west road that runs from Blackford Elementary School to the west to First Street to the east. Willow Street provides a connection between the Willow Glen area and central San José. Access to the site from Willow Street is provided via Lelong Street.

Bird Avenue is a four-lane north-south arterial that provides access to I-280 and the Downtown area. Bird Avenue runs from the Willow Glen area, starting at Malone Road, to Park Avenue, in Downtown San José. Access to the site from Bird Avenue is provided via Willow Street and Minnesota Avenue (Alma Avenue).

Existing Bicycle and Pedestrian Facilities

There are several bicycle facilities near the Lelong Street GP site. As defined by the California Department of Transportation (Caltrans), bicycle facilities include Class I bikeways (defined as bike paths off street, which is shared with pedestrians and excludes general motor vehicle traffic), Class II bikeways (defined as striped bike lanes on street), Class III bike routes (defined as roads with bike route signage where bicyclists share the road with motor vehicles), and Class IV cycle tracks (bike lanes physically separated from vehicle traffic by a vertical element. Bicyclists are allowed to ride on any roadway, even if there is no bicycle facility present with the exception of limited access highways.

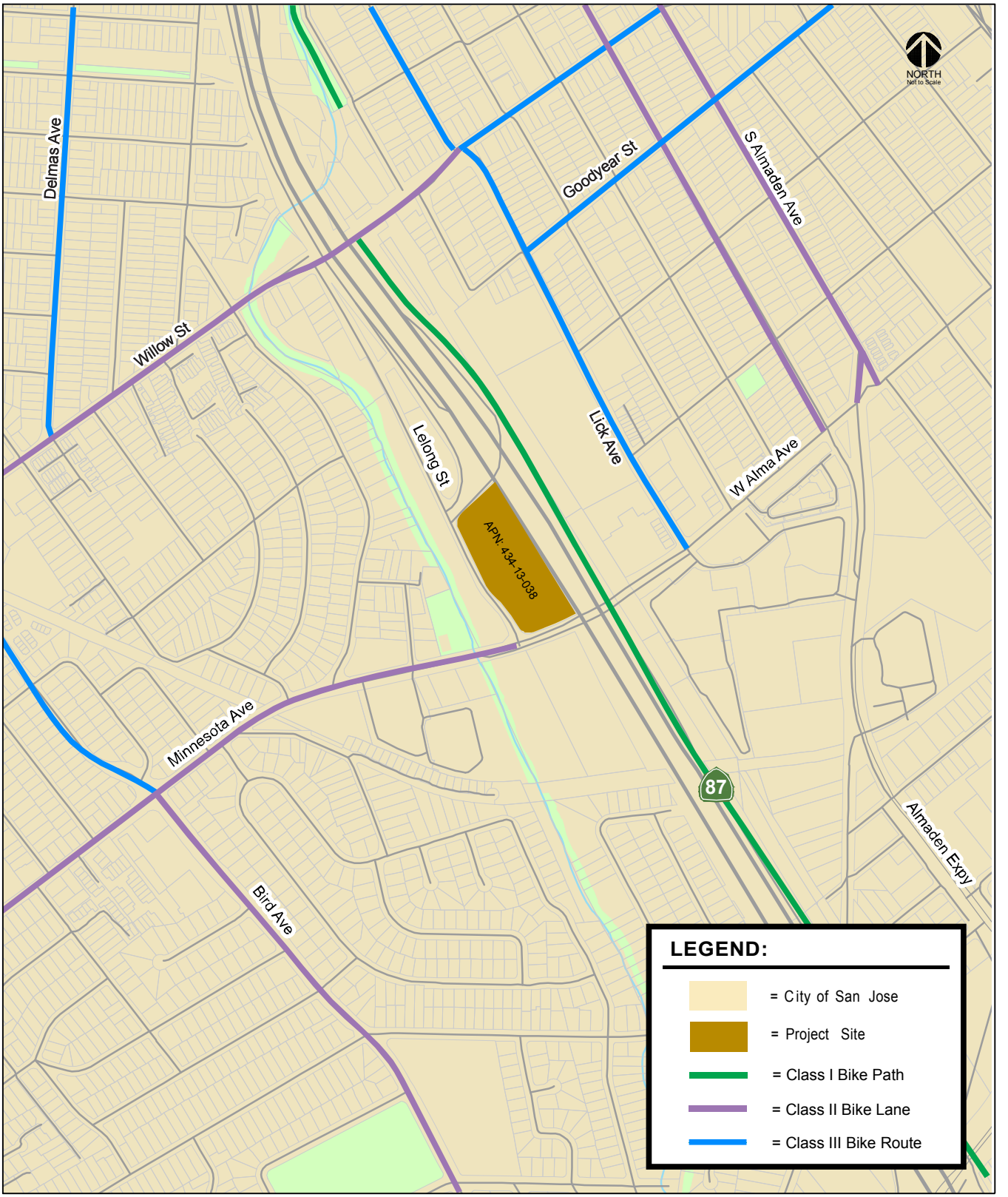
Class II striped bike lanes are provided on the following roadways near the site:

- Alma Avenue/Minnesota Avenue – Between Lelong Street and Meridian Avenue
- Willow Street – Between Lick Avenue and Blackford Elementary School
- Bird Avenue – Between Minnesota Avenue and Malone Road
- Vine Street – North of Alma Avenue
- Almaden Avenue – North of Alma Avenue

The Guadalupe River multi-use trail system (Class I bikeways) runs along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. This trail system can be accessed via Willow Street and Alma Avenue. The existing bicycles facilities are shown on Figure 22.

In addition, the City of San José bicycle master plan*, San José Bike Plan 2020*, provides policies and improvements to bicycle facilities to improve the use of bicycles in the City. It includes an inventory of existing bicycle facilities and identifies locations for enhancement of existing facilities by expansion and or establishing potential connections.

Figure 22
Existing Bicycle Facilities (Lelong Street)



Pedestrian facilities near the project consist primarily of sidewalks along the streets in most residential and commercial areas, as well as the aforementioned bike/pedestrian path. Sidewalks are found along virtually all previously described local roadways in the study area and along the local residential streets and collectors near the site with the exception of Lelong Street, where sidewalks are missing along the west side of the street.

Existing Transit Services

Existing transit services to the study area are provided by the VTA. The VTA transit services are described below and shown on Figure 23.

VTA Bus Services

Local Route 25 runs from De Anza College to Alum Rock Transit Center via Willow Street and operates from 5:00 AM to 12:30 AM with 15-minute headways during the weekday commute periods. The nearest bus stop to the Lelong Street site served by Route 25 is located on the site, adjacent to the Tamien Caltrain/VTA LRT Station.

Local Route 82 runs from Westgate Shopping Center to Downtown San José via Alma Avenue and operates from 6:00 AM to 9:30 PM with 30-minute headways during the weekday commute periods. The nearest bus stop to the Lelong Street site served by Route 82 is located on the site, adjacent to the Tamien Caltrain/VTA LRT Station.

Express Route 168 runs from Gilroy Transit Center to San José Diridon Transit Center via SR 87 and operates seven trips northbound in the AM and southbound in the PM with 20- to 30-minute headways during the weekday commute periods. However, there are no bus stops served by Route 168 in the vicinity of the project site.

Express Route 182 runs from Palo Alto to IBM/Bailey Avenue via SR 87 and operates one trip southbound in the AM and northbound in the PM. However, there are no bus stops served by Route 182 in the vicinity of the project site.

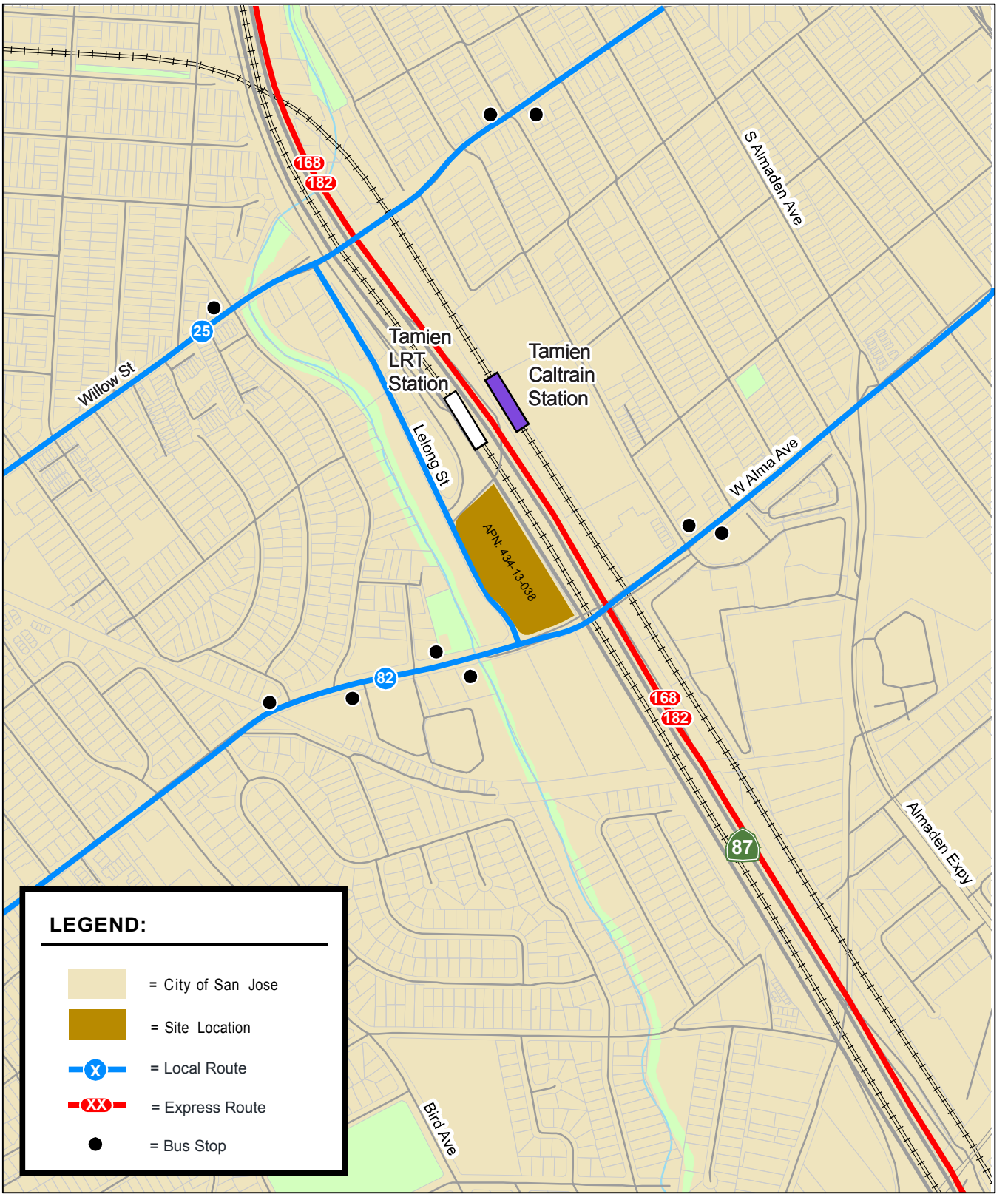
Light Rail Transit (LRT) Service

The Lelong Street GP site is located adjacent to the Tamien LRT Station. LRT service at the Tamien LRT station is provided by the Alum Rock-Santa Teresa LRT line, which operates nearly 24 hours a day (4:00 AM to 2:00 AM) with 10-15-minute headways during peak commute and midday hours. The Alum Rock-Santa Teresa LRT line provides service from the Santa Teresa Station in south San José, through Downtown San José to north San José where it curves east and operates along the Tasman Corridor, bends south and runs along the Capitol Corridor, and ultimately terminates in east San José just south of Alum Rock Avenue.

Caltrain Service

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The Lelong Street GP site is located adjacent to the Tamien Caltrain Station. The Tamien Station provides 275 (free) parking spaces, as well as 18 bike racks and 18 bike lockers. Trains stop frequently at the Tamien Station between 4:55 AM and 9:37 PM in the northbound direction, and between 7:06 AM and 11:11 PM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

Figure 23
Existing Transit Services (Lelong Street)



General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed Lelong Street site GPA were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to calculate daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendment is considered a significant impact.

As shown in Table 26, both the citywide daily VMT and VMT per service population would decrease slightly with the proposed land use amendment when compared to the current GP. Therefore, the proposed Lelong Street GPA would result in a *less than significant* impact on the citywide daily VMT per service population.

Table 26
Daily Vehicle Miles Traveled Per Service Population (Lelong Street)

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,046,059	28,041,247
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.57	13.65	13.65
Increase in VMT/Service Population over General Plan Conditions			***-0.01***
Significant Impact?			**No**

Note:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Service Population = Residents + Jobs
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in

the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.

Table 27 summarizes the citywide journey-to-work mode share analysis results. When compared to the current GP, the percentage of journey-to-work drive alone trips would not change as a result of the proposed land use amendment. Approximately 72% of the commuters would drive single occupancy vehicles to travel to and from work under the current GP and the current GP with the proposed land use amendment. Therefore, the proposed Lelong Street GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

Table 27
Journey-to-Work Mode Share (Lelong Street)

	Base Year (2015)		2040 General Plan (Baseline)		2040 General Plan Plus GPA	
Mode	**Trips**	**%**	**Trips**	**%**	**Trips**	**%**
Drive Alone	753,264	79.7%	1,098,198	72.0%	1,098,055	72.0%
Carpool 2	85,496	9.0%	138,716	9.1%	138,663	9.1%
Carpool 3+	28,526	3.0%	55,275	3.6%	54,919	3.6%
Transit	48,181	5.1%	177,546	11.6%	178,187	11.7%
Bicycle	14,120	1.5%	26,119	1.7%	26,101	1.7%
Walk	15,666	1.7%	28,839	1.9%	28,840	1.9%
Increase in Drive Alone Percentage over General Plan Conditions						0.0%
Significant Impact?						**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 28 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in travel speeds of 0.3 mph or less (or a change of 1.9% or less) on 11 corridors due to the proposed land use amendment. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the proposed Lelong Street GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Table 28
AM Peak Hour Vehicle Speeds (mph) for San José Transit Priority Corridors (Lelong Street)

Transit Priority Corridor	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA	% Change (GPplusGPA - GP) / GP	Absolute Change (GPplusGPA - GP)
2nd St from San Carlos St to St. James St	16.6	15.7	15.4	-1.9%	-0.3
Alum Rock Av from Capitol Av to US 101	21.3	16.6	16.5	-0.9%	-0.1
Camden Av from SR 17 to Meridian Av	23.1	18.1	18.0	-0.6%	-0.1
Capitol Av from S. Milpitas Bl to Capitol Expwy	27.1	22.8	22.7	-0.3%	-0.1
Capitol Expwy from Capitol Av to Meridian Av	33.0	26.9	27.0	0.2%	0.0
E. Santa Clara St from US 101 to Delmas Av	20.4	16.2	16.1	-0.8%	-0.1
Meridian Av from Park Av to Blossom Hill Rd	24.9	20.9	20.7	-0.6%	-0.1
Monterey Rd from Keyes St to Metcalf Rd	27.4	19.2	19.6	2.2%	0.4
N. 1st St from SR 237 to Keyes St	21.3	13.9	13.7	-1.0%	-0.1
San Carlos St from Bascom Av to SR 87	24.8	20.8	20.7	-0.6%	-0.1
Stevens Creek Bl from Bascom Av to Tantau Av	24.3	18.8	18.7	-0.1%	0.0
Tasman Dr from Lick Mill Bl to McCarthy Bl	22.7	13.8	13.7	-0.6%	-0.1
The Alameda from Alameda Wy to Delmas Av	20.5	14.3	14.3	0.0%	0.0
W. San Carlos St from SR 87 to 2nd St	20.0	19.3	19.1	-0.8%	-0.2

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Adjacent Jurisdictions

The San José GP TDF model was used to calculate the number of lane miles of street segments with V/C ratios of 1.0 or greater during the peak 4-hour AM period within adjacent jurisdictions.

The effect of the proposed land use adjustments is evaluated based on the percentage of traffic that would be added to the deficient roadways. As defined in the City of San José *Transportation Analysis*

Handbook (Thresholds of Significance for General Plan Amendments (Table 11), a deficient roadway segment in an adjacent jurisdiction is attributed to San José when trips originating from residents and jobs within San José equal 10 percent or more on the deficient segment. An impact to an adjacent jurisdiction is considered significant when 25% or more of total deficient lane miles are attributable to the City of San José. The 25% threshold represents what would be a noticeable change in traffic.

Table 29 summarizes the City of San José's traffic impacts on the roadway segments within adjacent jurisdictions. City of San José traffic would significantly impact roadway segments within the same 13 adjacent jurisdictions under both the current GP and the current GP plus proposed land use amendment conditions. With the proposed land use amendment, the percentage of deficient lane miles attributable to the City would increase by 1% at one of the 13 impacted jurisdictions and would remain unchanged at the remaining 12 impacted jurisdictions, when compared to the current GP. Additionally, San José traffic contribution to Los Altos roadway segments would increase from 17% under the current GP to 20% under the proposed land use amendment. However, the Los Altos roadway segments would not be significantly impacted under the current General Plan conditions or the proposed GPA conditions since the percentage of deficient lane miles attributable to San José would continue to be less than the 25% threshold. The proposed land use amendment would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Therefore, the proposed Lelong Street GPA would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the Lelong Street GP site develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.

Table 29
AM 4-Hour Traffic Impacts in Adjacent Jurisdictions (Lelong Street)

City	Base Year (2015)			2040 General Plan (Baseline)			2040 General Plan Plus GPA		
	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose
Campbell	0.12	0.12	100%	1.15	1.15	100%	1.15	1.15	100%
Cupertino	1.67	1.19	72%	2.60	2.23	86%	2.60	2.23	86%
Gilroy	0.34	0.34	100%	0.00	0.00	0%	0.00	0.00	0%
Los Altos	0.50	0.00	0%	1.49	0.25	17%	1.28	0.25	20%
Los Altos Hills	0.38	0.13	35%	2.51	1.95	78%	2.51	1.95	78%
Los Gatos	0.22	0.22	100%	1.34	1.34	100%	1.34	1.34	100%
Milpitas	0.39	0.39	100%	5.54	5.54	100%	5.54	5.54	100%
Monte Sereno	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%
Morgan Hill	0.00	0.00	0%	0.24	0.24	100%	0.24	0.24	100%
Mountain View	0.39	0.28	71%	1.60	1.48	93%	1.60	1.48	93%
Palo Alto	0.88	0.31	35%	2.42	0.76	31%	2.42	0.76	31%
Santa Clara	0.00	0.00	0%	0.60	0.60	100%	0.60	0.60	100%
Saratoga	0.00	0.00	0%	0.63	0.63	100%	0.63	0.63	100%
Sunnyvale	0.81	0.81	100%	0.53	0.48	90%	0.53	0.48	90%
Caltrans Facilities	5,743.69	4,433.43	77%	5,856.67	4,783.14	82%	5,794.19	4,783.71	83%
Santa Clara County Expressways	0.62	0.51	81%	5.97	5.95	100%	5.97	5.95	100%

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = General Plan Amendment
1. Total deficient lane miles are total lane miles of street segments with V/C ratios of 1.0 or greater.
2. A deficient roadway segment is attributed to San Jose when trips from the City are 10% or more on the deficient segment.
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

9. Downtown Strategy 2040 (Site-Specific GPA Traffic Analysis)

This report presents the results of the long-range site-specific traffic impact analysis for the proposed Downtown Strategy (DTS) 2040 General Plan Amendment. The purpose of the General Plan Amendment (GPA) traffic analysis is to assess the long-range impacts of the proposed land use amendment associated with the addition of 4,000 residential units and 10,000 jobs to the Downtown on the citywide transportation system. The potential traffic impacts of the project were evaluated in accordance with the guidelines and thresholds set forth by the Envision San José 2040 General Plan (GP).

Downtown Strategy 2040 (DTS 2040) Amendment

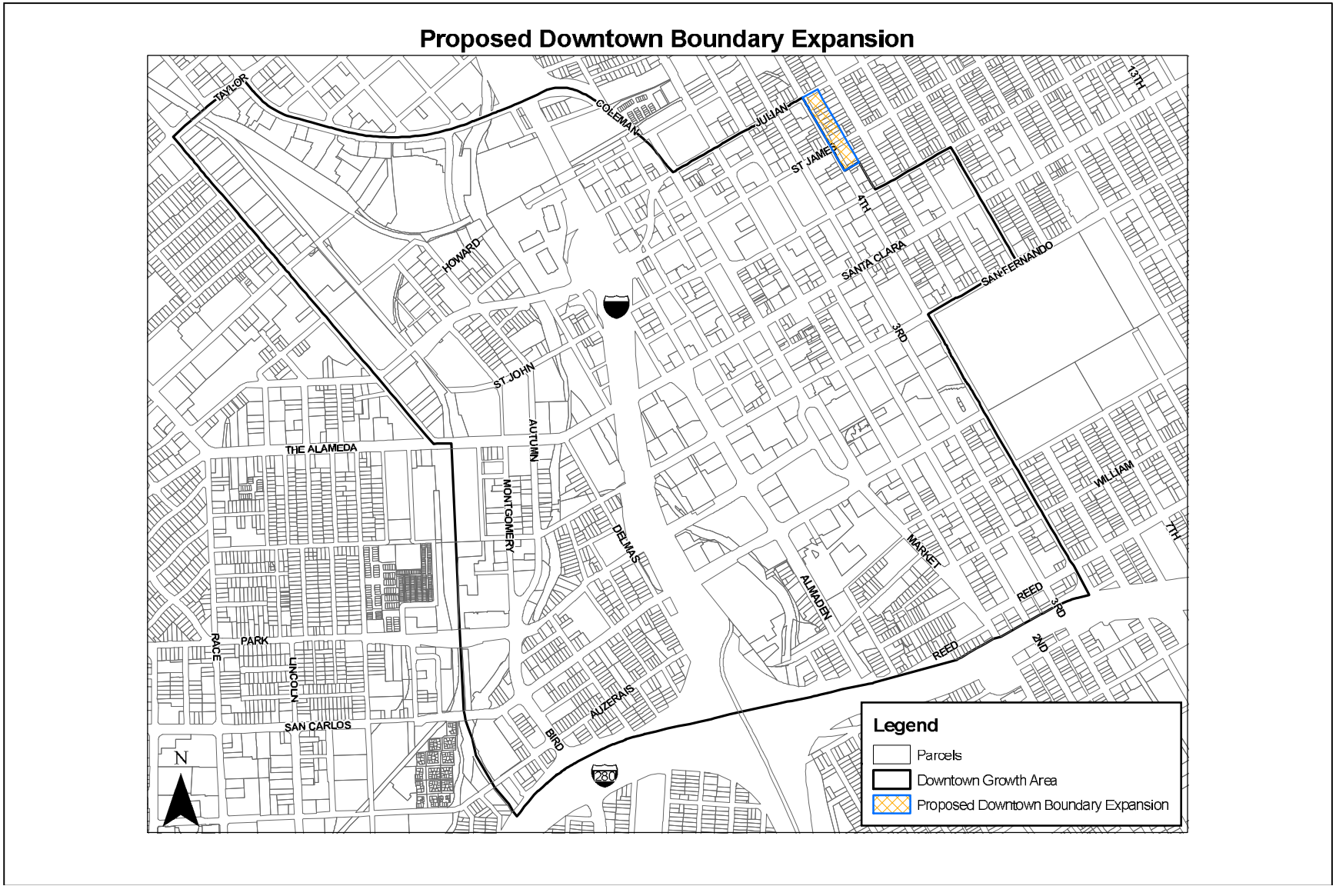
San José's Downtown encompasses approximately three square-miles generally bounded by Taylor Street to the north, San José State University and City Hall to the east, Interstate 280 to the south, and the Diridon Station Area to the west. State Route 87 runs in a north/south direction and divides Downtown. Los Gatos Creek flows into the Guadalupe River at the confluence of Santa Clara Street on the west side of State Route 87. The Downtown growth boundaries are shown on Figure 24.

The Downtown Strategy 2000 EIR evaluated the traffic generated by overall Downtown development with a horizon Year of 2020. The Downtown Strategy 2000 was incorporated into the current Envision San José 2040 GP that was adopted in November 2011.

The DTS 2040 proposes to increase the allowed number of households and jobs within the Downtown Growth Boundary (DGB) by 2040, when compared to the Envision San José 2040 GP. However, the proposed increases in residential units and employment space would not result in an increase in the overall citywide number of residential units and jobs envisioned in the GP.

The GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, provide a trip threshold for GP land use amendments that require a site-specific GPA analysis. With the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas, a proposed land use amendment that would result in an increase of more than 250 peak-hour trips to be generated by the subject site due to proposed increases in households or employment would be required to prepare a site-specific GPA traffic analysis. The proposed DTS 2040 amendment would result in 4,000 additional households and 10,000 additional jobs within the Downtown area. The increase in households and jobs would result in an additional 3,287 AM and 4,568 PM peak hour trips within the Downtown area when compared to the current GP land use designation

Figure 24
Downtown Strategy Plan Growth Boundaries



(see Table 30). Therefore, a site-specific GPA traffic analysis is required for the proposed DTS 2040 land use amendment. The GPA does not propose any changes to the city's major transportation system and the transportation policies that were adopted in the Envision San José 2040 GP.

Table 30
Changes in Households, Jobs, and Peak-Hour Trips Due to Downtown Strategy 2040 Land Use Amendment

Site Name	General Plan (Baseline) [1]		General Plan Amendment [2]		Net Land Use Change		Net Peak-Hour Trip Change	
	TOTHH	TEMP	TOTHH	TEMP	TOTHH	TEMP	AM	PM
Downtown Strategy 2040	15,784	80,509	19,784	90,456	4,000	10,000	**3,287**	**4,568**

Notes: TOTHH = total number of households; TEMP = total number of jobs.
[1] Total number of households and jobs under the adopted Envision San Jose 2040 General Plan (GP).
The buildout of the 2040 GP represents baseline conditions.
[2] Total number of households and jobs as proposed by the Downtown Strategy (DTS) 2040 land use amendment.
Outlined indicates GPA that results in an increase in peak hour trips greater than 250 trips and requires site-specific GPA traffic analysis.
Sources: City of San Jose Planning Department, June 2018
City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Scope of the Study

The GPA analysis includes the evaluation of the potential for the proposed land use amendment to result in increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, impacts to roadways in adjacent jurisdictions, and impacts to pedestrian, bicycle, and transit facilities. Impacts are evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GP TIA and described in Chapter 3 of this report. Traffic conditions were evaluated for the following traffic scenarios using the City of San José's Traffic Demand Forecasting (TDF) model:

- **Projected Year 2015 Conditions:** The Projected Year 2015 Conditions represent a projection of transportation conditions in 2015 using the City's GP TDF model. The roadway network also reflects the Year 2015 roadway network and transportation system.

- **Current 2040 General Plan Conditions:** Future traffic due to the current GP land uses (i.e., including the adopted Four-Year GP Review Land Use adjustments) is added to regional growth that can be reasonably expected to occur by 2040. Current 2040 GP conditions include the citywide roadway network to reflect the current roadway network as well as all transportation system improvements as identified in the current GP.

- **Proposed 2040 General Plan Amendment Conditions:** Current 2040 GP conditions with the proposed land use amendment associated with the DTS 2040. Transportation conditions for the Proposed 2040 GP Amendment Conditions were evaluated relative to the Current 2040 GP Conditions to determine any long-range traffic impacts.

Existing Conditions

This section describes the existing conditions for all of the major transportation facilities within the Downtown area, including the roadway network, transit service, and bicycle and pedestrian facilities.

Existing Roadway Network

Regional access to the Downtown area is provided via SR-87, I-280, I-880, US 101, and I-680. These facilities are described below:

***State Route* 87** (SR 87*)* connects from SR 85 in south San José to US 101 near the San José International Airport. It is generally a six-lane freeway (two mixed-flow lanes plus one HOV lane in each direction) with auxiliary lanes near the I-280 interchange. Connections from SR 87 to Downtown San José are provided via a full interchange at West Julian Street and partial interchanges at Park Avenue (ramps to/from north only), at Auzerais Avenue (ramps to/from south only), and at West Santa Clara Street (northbound off-ramp only).

Interstate 280 (I-280) is generally an eight-lane freeway near Downtown San José with auxiliary lanes between some interchanges. It extends from US 101 in San José to I-80 in San Francisco. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Connections from I-280 to Downtown San José are provided via a full interchange at Bird Avenue, and partial interchanges at Seventh Street (no north on-ramp), at Almaden Boulevard/Vine Street (ramps to/from north), First Street (ramp to south), and Fourth Street (ramp to north). Connections are also available indirectly via an interchange with SR 87 and an interchange with US 101.

Interstate 880 (I-880) extends in a north-south direction from its junction with I-280 near Downtown San José to I-80 in Oakland. Within the study area, I-880 has six mixed-flow lanes. I-880 lies somewhat north of Downtown San José, but has connections via interchanges at The Alameda, Coleman Avenue, and First Street.

US 101 is a north-south freeway that extends northward though San Francisco and southward through Gilroy. Within the study area, US 101 is an eight-lane facility that includes two high-occupancy vehicle (HOV) lanes. US 101 lies to the east of Downtown, with access to the Downtown area provided via interchanges with Santa Clara Street and Julian Street and its connection with I-280.

Interstate-680 (I-680) is an eight-lane freeway providing regional access to San José. It extends in a north-south direction from its junction with I-280 and US 101 near Downtown San José through the East Bay to its junction with I-80 in Fairfield. I-680 is located east of Downtown San José, but has connections via its transition to I-280 through Downtown.

Local access to the Downtown area is provided by numerous major arterials and minor streets. Described below are the major arterials that feed the Downtown area:

Market Street is a north-south four-lane roadway that runs from Julian Street to Reed Street. North of Julian Street, Market Street becomes Coleman Avenue. South of Reed Street, Market Street becomes South First Street.

Coleman Avenue is a four-lane arterial that provides access to I-880 and the Airport from the Downtown area. It runs in a north-south direction from Julian Street at the northern boundary of Downtown San José to De La Cruz Boulevard in Santa Clara. Between I-880 and De La Cruz Boulevard, Coleman Avenue provides three lanes in each direction.

North First Street is a one-lane and one-way northbound street between San Carlos Street and Julian Street. From San Carlos to Julian Street, the Guadalupe LRT line runs along the right side of First Street. North of Julian Street, First Street transitions to a two-way roadway that is divided by the Guadalupe LRT line. South of San Carlos Street, First Street transitions to a two-way roadway and becomes Monterey Road.

Almaden Boulevard is a six-lane north-south roadway that runs from Julian Street to I-280. South of I-280, Almaden Boulevard provides access to and from the south via its connections to Vine Street and Almaden Avenue. Access to SR 87 is provided via its intersection with Notre Dame Street and Santa Clara Street.

Bird Avenue is a four-lane north-south arterial that provides access to I-280 and the Downtown area. Bird Avenue runs from the Willow Glen Area to Park Avenue.

Julian Street is primarily a one-way westbound two-lane roadway within the Downtown core. West and east of the Downtown core at SR 87 and 17th Street, respectively, Julian Street is generally a two-way two-lane facility. Julian Street provides regional access to the Downtown area through its full interchange with SR 87.

The Alameda (State Route 82) is generally a four-lane north-south arterial that runs from Santa Clara University to the Downtown area (Diridon Train Station) where it becomes Santa Clara Street.

Santa Clara Street is a four-lane east-west roadway that provides access from the east and west of the Downtown area. East of US 101, Santa Clara Street becomes Alum Rock Avenue while west of the Caltrain bridge it becomes The Alameda.

San Fernando Street is a four-lane east-west arterial that runs from 17th Street to Montgomery Street. Outside of the Downtown area, specifically west of Almaden Boulevard and east of 10th Street, San Fernando Street is a two-lane roadway.

San Carlos Street is a four-lane east-west arterial that runs from 4th Street to I-880 at which point it becomes Stevens Creek Boulevard.

Park Avenue is an east-west roadway that extends from Market Street to Meridian Avenue. West of Meridian Avenue, Park Avenue proceeds in a northwest direction into Santa Clara. Park Avenue transitions from two to four lanes at various points.

Fourth Street is a north-south arterial that runs from I-280 to US 101. Limited freeway access is provided via a northbound ramp to I-280 and southbound ramp to US 101. Between Taylor Street and I-280, Fourth Street is a three-lane one-way southbound roadway. Two lanes in each direction are provided north of Taylor Street.

Seventh Street is a two-lane north-south roadway providing access from northbound and southbound I-280. Seventh Street runs from Hedding Street to San José State University (SJSU), at which point it ends. It continues on the south side of SJSU to I-280.

Tenth Street is a one-way three-lane southbound arterial that runs from I-880 to Tully Road.

Eleventh Street is a one-way three-lane northbound arterial that runs from Keyes Street to Hedding Street.

Existing Bicycle and Pedestrian Facilities

Pedestrian facilities in the study area consist primarily of sidewalks, pedestrian push buttons, and signal heads at intersections. With a few exceptions, sidewalks are found along virtually all previously

described local roadways in the study area and along the local residential streets and collectors surrounding the Downtown area. Most of the Downtown area has wider than normal sidewalks to accommodate pedestrians. There are also paseos, pedestrian thoroughfares absent of vehicles that provide for walking, gathering, and shopping, located within the Downtown area.

There are several bicycle facilities in the Downtown area. As defined by the California Department of Transportation (Caltrans), bicycle facilities include Class I bikeways (defined as bike paths off street, which is shared with pedestrians and excludes general motor vehicle traffic), Class II bikeways (defined as striped bike lanes on street), Class III bike routes (defined as roads with bike route signage where bicyclists share the road with motor vehicles), and Class IV cycle tracks (bike lanes physically separated from vehicle traffic by a vertical element. Bicyclists are allowed to ride on any roadway, even if there is no bicycle facility present, with the exception of limited access highways. The existing bicycles facilities are shown on Figure 25.

The *Santa Clara Countywide Bicycle Plan*, adopted by VTA in August 2018, identifies various existing and/or planned cross county bicycle corridors in the Downtown area. The purpose of the cross-county Bicycle Corridors, as described in the above document, is to provide continuous connections between Santa Clara County jurisdictions and to adjacent counties, and to serve the major regional trip-attractors in the County. There are currently two designated cross-county bicycle corridors in the Downtown area:

SR 87/Guadalupe LRT cross-county bicycle corridor runs along the extent of SR 87.

I-880/I-680/SR 17/Vasona Rail/Los Gatos Creek cross-county bicycle corridor runs along San Carlos Street and Santa Clara Street.

Guadalupe River Park Trail

The Guadalupe River multi-use trail system runs through the Downtown area along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. This trail system can be accessed via nearly every intersecting east-west street in the Downtown area including Julian Street, Santa Clara Street, San Fernando Street, Park Avenue, and San Carlos Street.

Bay Area Bike Share

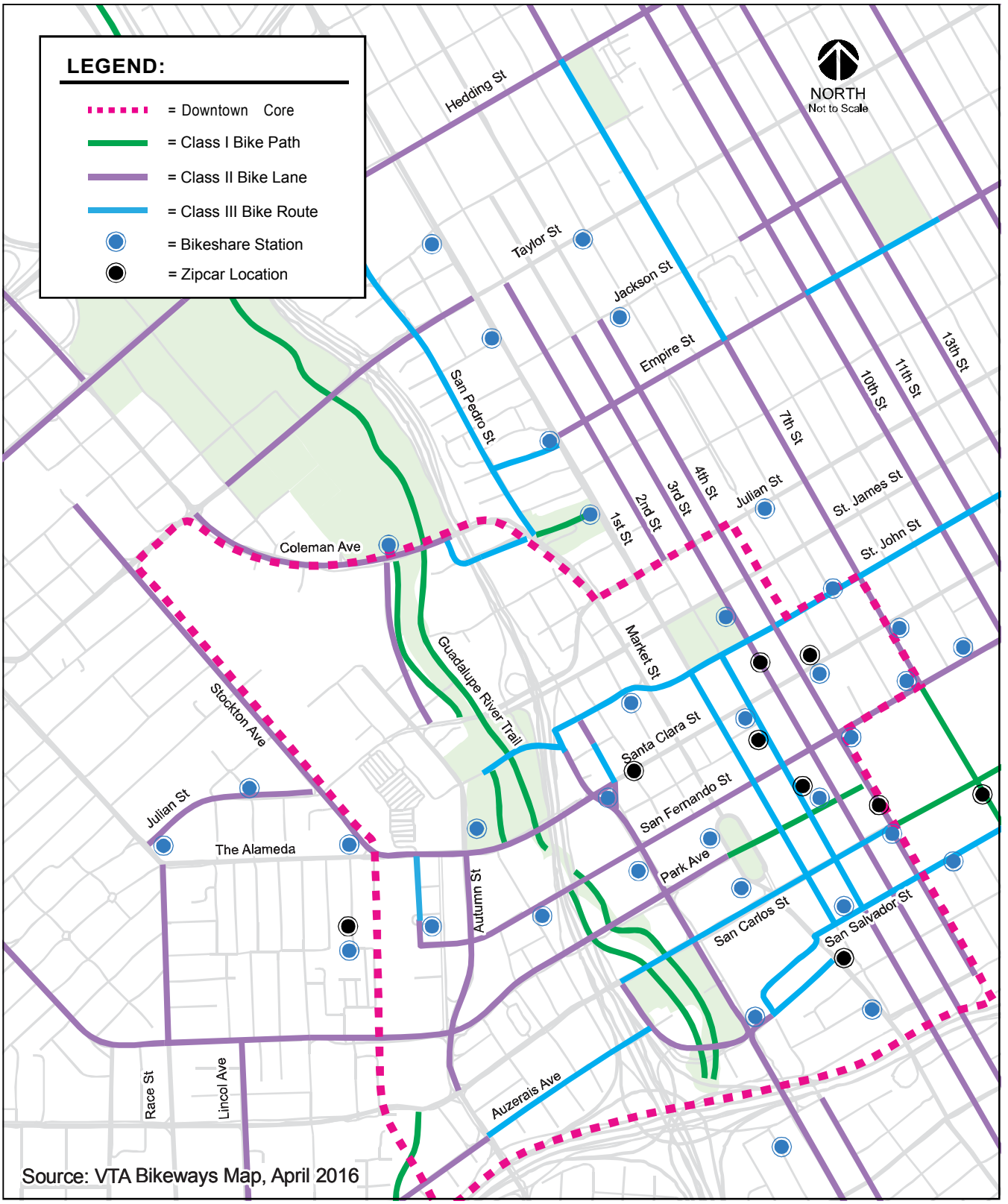
The City of San José participates in the Bay Area Bike Share program (Ford GoBike) that allows users to rent and return bicycles at various locations. Bike share bikes can only be rented and returned at designated stations throughout the Downtown area. Existing bikeshare docks are shown on Figure 25.

In addition, LimeBike has recently begun to provide dockless bike rental throughout the Downtown area. This service provides electric bicycles and scooters with GPS self-locking systems that allow for rental and drop-off anywhere.

Zipcar

Zipcar provides vehicles to individuals for hourly or daily use. This program places vehicles at designated Zipcar locations throughout the Downtown area for use by individuals who have Zipcar accounts. This car sharing service allows drivers' access to an automobile without the need to own one. There are seven Zipcar stations located within the DGB area. Existing Zipcar locations are shown on Figure 25.

Figure 25
Existing Bicycle Facilities (Downtown San José)



Existing Transit Services

Downtown San José is a hub for nearly all major transit services. Connections between bus lines, light rail, and Caltrain are provided within the Downtown area. The many choices and extensive transit system within Downtown make transit an attractive alternative to both employees and residents. Existing transit service within the greater Downtown area is provided by the VTA, Altamont Corridor Express (ACE), Amtrak, and Caltrain. The existing transit services are described below and shown on Figure 26.

VTA Bus Services

The Downtown area is served by numerous local buses. The VTA also provides a shuttle service within the Downtown area. The Downtown area shuttle (DASH) provides shuttle service from the San José Diridon Caltrain station to San José State University, and the Paseo De San Antonio and Convention Center LRT stations via East San Fernando and East San Carlos Streets.

VTA Light Rail Transit (LRT) Service

The VTA currently operates the 42.2-mile VTA light rail line system extending from south San José through Downtown to the northern areas of San José, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly 24-hours a day with 15-minute headways during much of the day. Various LRT Stations are located within the Downtown area, including the Diridon Transit Center, the St James, Santa Clara, Paseo de San Antonio, San Fernando, and Convention Center stations.

Caltrain Service

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The Diridon Station is located within the Downtown area. The Diridon station provides 581 parking spaces, as well as 16 bike racks, 48 bike lockers, and 27 Ford GoBike bike share docks. Trains stop frequently at the Diridon station between 4:28 AM and 10:30 PM in the northbound direction, and between 6:31 AM and 1:38 AM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

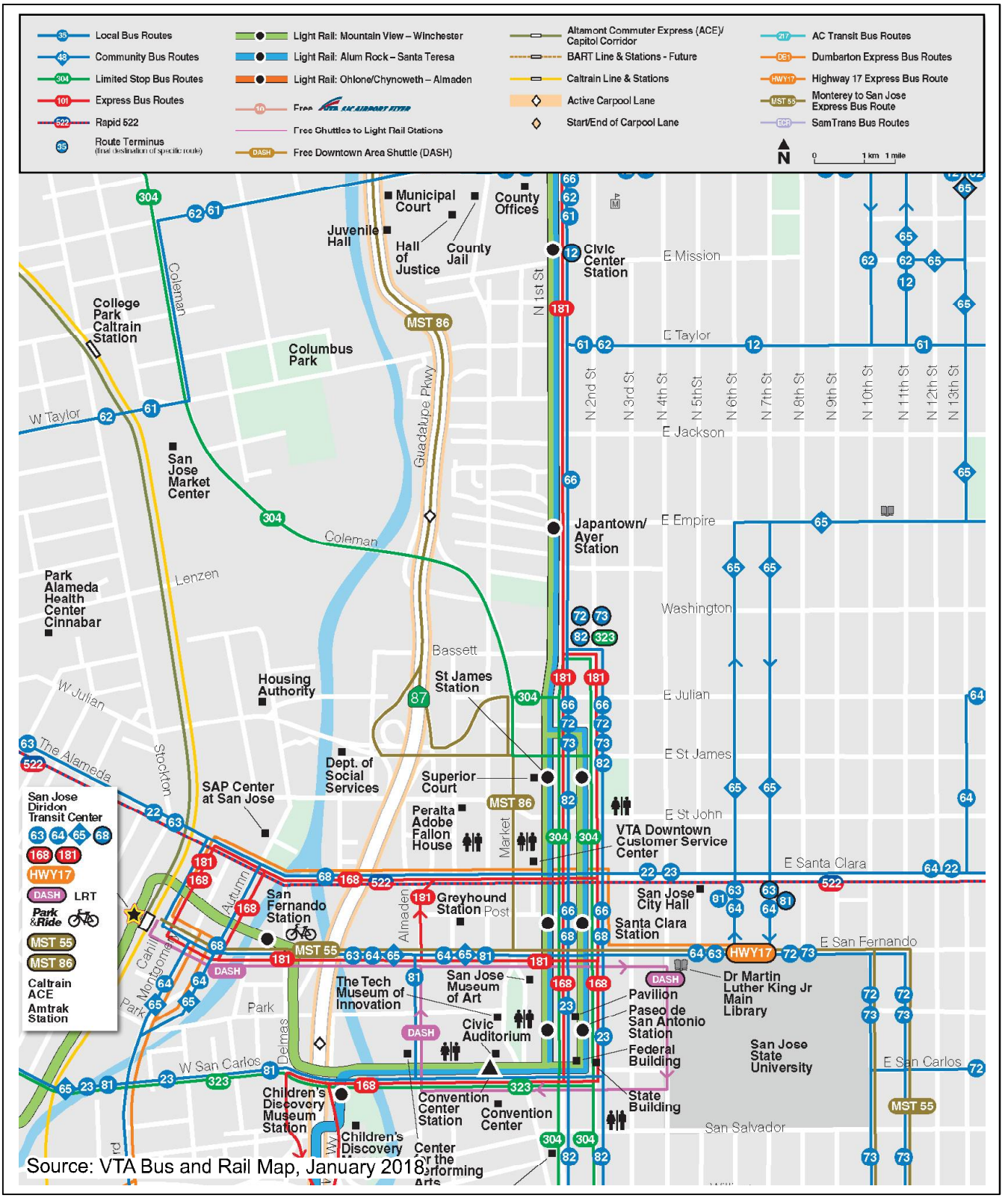
Altamont Corridor Express Service (ACE)

ACE provides commuter rail service between Stockton, Lathrop/Manteca, Tracy, Livermore, Pleasanton, Fremont, Santa Clara, and San José during commute hours, Monday through Friday. Service is limited to four westbound trips in the morning and four eastbound trips in the afternoon and evening with headways averaging 60 minutes. ACE trains stop at the Diridon Station between 6:32 AM and 9:17 AM in the westbound direction, and between 3:35 PM and 6:38 PM in the eastbound direction.

Amtrak Service

Amtrak provides daily commuter passenger train service along the 170-mile Capitol Corridor between the Sacramento region and the Bay Area, with stops in San José, Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun City, Davis, Sacramento, Roseville, Rocklin, and Auburn. The Capitol Corridor trains stop at the San José Diridon Station eight times during the weekdays between approximately 7:38 AM and 11:55 PM in the westbound direction. In the eastbound direction, Amtrak stops at the Diridon Station seven times during the weekdays between 6:40 AM and 7:15 PM.

Figure 26
Existing Transit Services (Downtown San José)



Source: VTA Bus and Rail Map, January 2018

General Plan Amendment Site-Specific Long-Range Analysis

The site-specific long-range traffic impacts resulting from the proposed DTS 2040 were determined based on the MOEs and associated significance thresholds described in Chapter 3. The results of the site-specific GPA long-range analysis are described below.

Vehicle Miles Traveled Per Service Population

The San José GP TDF model was used to calculate daily vehicle miles traveled (VMT) per service population, where service population is defined as the number of residents plus the number of employees citywide. This approach focuses on the VMT generated by new population and employment growth. VMT is calculated as the number of vehicle trips multiplied by the length of the trips in miles. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in VMT per service population over the current GP conditions due to the proposed land use amendment is considered a significant impact.

As shown in Table 31, the citywide daily VMT and VMT per service population would decrease slightly with the proposed DTS 2040 amendment when compared to the current GP. Therefore, the proposed DTS 2040 GPA would result in a *less than significant* impact on the citywide daily VMT per service population.

Table 31
Daily Vehicle Miles Traveled Per Service Population (DTS 2040 Amendment)

	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA
Citywide Daily VMT	17,505,088	28,046,059	27,827,014
Citywide Service Population	1,392,946	2,054,758	2,054,758
- Total Households	319,870	429,350	429,350
- Total Residents	1,016,043	1,303,108	1,303,108
- Total Jobs	376,903	751,650	751,650
Daily VMT Per Service Population	12.6	13.6	13.5
Increase in VMT/Service Population over General Plan Conditions			***-0.1***
Significant Impact?			**No**

Note:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = Downtown Stragety 2040 General Plan Amendment
Service Population = Residents + Jobs
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Journey-to-Work Mode Share

The San José GP TDF model was used to calculate journey-to-work citywide mode share percentages. Mode share is the distribution of all daily work trips by travel mode. The modes of travel included in the TDF model are drive alone, carpool with two persons, carpool with three persons or more, transit (rail and bus), bike, and walk trips. Although work trips may occur at any time of the day, most of the work

trips occur during typical peak commute periods (6:00 – 10:00 AM and 3:00 – 7:00 PM). As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), any increase in the journey-to-work drive alone mode share percentage over the current GP conditions due to the proposed land use amendment is considered a significant impact.

Table 32 summarizes the citywide journey-to-work mode share analysis results. Compared to the current GP, the percentage of journey-to-work drive alone trips would decrease slightly as a result of the proposed DTS 2040 GPA. The percentages of transit and walk trips would increase slightly as a result of the DTS 2040 GPA. This is due to the reallocation of 4,000 households and 10,000 jobs to the Downtown area, where there are more jobs and transit options. Vehicle trips citywide would be reduced due to an increase in trips made via transit and non-motorized travel modes (bicycle and walk) within the Downtown area. Therefore, the proposed DTS 2040 GPA would result in a *less than significant* impact on citywide journey-to-work drive alone mode share.

Table 32
Journey-to-Work Mode Share (DTS 2040 Amendment)

Mode	Base Year (2015)		2040 General Plan (Baseline)		2040 General Plan Plus GPA	
	Trips	%	Trips	%	Trips	%
Drive Alone	753,264	79.7%	1,098,198	72.0%	1,089,242	71.5%
Carpool 2	85,496	9.0%	138,716	9.1%	137,570	9.0%
Carpool 3+	28,526	3.0%	55,275	3.6%	54,729	3.6%
Transit	48,181	5.1%	177,546	11.6%	185,222	12.2%
Bicycle	14,120	1.5%	26,119	1.7%	26,379	1.7%
Walk	15,666	1.7%	28,839	1.9%	29,762	2.0%
Increase in Drive Alone Percentage over General Plan Conditions						-0.5%
Significant Impact?						**No**

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = Downtown Stragety 2040 General Plan Amendment
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Average Vehicle Speeds in Transit Priority Corridors

The San José GP TDF model was used to calculate the average vehicle travel speeds during the AM peak-hour for the City's 14 transit corridors that were evaluated in the Envision San José 2040 GP TIA. The analysis of transit priority corridor speeds was completed to assist with the assessment of whether the proposed land use amendment would cause a significant change in travel speeds on the transit priority corridors compared to the current GP. A transit corridor is a roadway segment identified as a Grand Boulevard in the Envision San José 2040 GP Land Use/Transportation Diagram. Grand Boulevards serve as major transportation corridors and, in most cases, are primary routes for VTA's LRT, BRT, local buses, and other public transit vehicles. The travel speeds are calculated by dividing the segment distance by the vehicle travel time. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), land use amendments that result in a decrease in average travel speed on a transit corridor in the AM peak one-

hour period when the average speed drops below 15 miles per hour (mph) or decreases by 25 percent (%) or more, or the average speed drops by one mph or more for a transit corridor with average speed below 15 mph when compared to the current GP conditions is considered a significant impact.

Table 33 presents the average vehicle speeds on the City's 14 transit priority corridors (i.e., Grand Boulevard segments) during the AM peak-hour of traffic. When compared to the travel speeds under current GP conditions, the change in traffic resulting from the proposed land use amendment would have a minimal effect on the travel speeds in the transit corridors. The TDF model estimates decrease in travel speeds of 0.5 mph or less (or a change of 3% or less) on eight corridors due to the proposed land use amendment. Travel speeds on the remaining corridors would improve slightly or remain unchanged when compared to the current GP. Therefore, the proposed DTS 2040 GPA would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Table 33
AM Peak Hour Vehicle Speeds (mph) for San José Transit Priority Corridors (DTS 2040 Amendment)

Transit Priority Corridor	Base Year (2015)	2040 General Plan (Baseline)	2040 General Plan Plus GPA	% Change (GPplusGPA - GP) / GP	Absolute Change (GPplusGPA - GP)
2nd St from San Carlos St to St. James St	16.6	15.7	15.5	-1.3%	-0.2
Alum Rock Av from Capitol Av to US 101	21.3	16.6	16.8	1.2%	0.2
Camden Av from SR 17 to Meridian Av	23.1	18.1	17.8	-1.7%	-0.3
Capitol Av from S. Milpitas Bl to Capitol Expwy	27.1	22.8	22.9	0.5%	0.1
Capitol Expwy from Capitol Av to Meridian Av	33.0	26.9	27.1	0.4%	0.1
E. Santa Clara St from US 101 to Delmas Av	20.4	16.2	15.9	-2.0%	-0.3
Meridian Av from Park Av to Blossom Hill Rd	24.9	20.9	20.6	-1.4%	-0.3
Monterey Rd from Keyes St to Metcalf Rd	27.4	19.2	19.9	3.4%	0.6
N. 1st St from SR 237 to Keyes St	21.3	13.9	13.7	-1.0%	-0.1
San Carlos St from Bascom Av to SR 87	24.8	20.8	20.5	-1.6%	-0.3
Stevens Creek Bl from Bascom Av to Tantau Av	24.3	18.8	18.7	-0.1%	0.0
Tasman Dr from Lick Mill Bl to McCarthy Bl	22.7	13.8	13.8	-0.3%	0.0
The Alameda from Alameda Wy to Delmas Av	20.5	14.3	14.2	-1.0%	-0.1
W. San Carlos St from SR 87 to 2nd St	20.0	19.3	18.9	-2.2%	-0.4

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = Downtown Strategy 2040 General Plan Amendment
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

Adjacent Jurisdictions

The San José GP TDF model was used to calculate the number of lane miles of street segments with V/C ratios of 1.0 or greater during the peak 4-hour AM period within adjacent jurisdictions.

The effect of the proposed land use adjustments is evaluated based on the percentage of traffic that would be added to the deficient roadways. As defined in the City of San José *Transportation Analysis Handbook* (Thresholds of Significance for General Plan Amendments (Table 11), a deficient roadway segment in an adjacent jurisdiction is attributed to San José when trips originating from residents and jobs within San José equal 10% or more on the deficient segment. An impact to an adjacent jurisdiction is considered significant when 25% or more of total deficient lane miles are attributable to the City of San José. The 25% threshold represents what would be a noticeable change in traffic.

Table 34 summarizes the City of San José's traffic impacts on the roadway segments within adjacent jurisdictions. City of San José traffic would significantly impact roadway segments within the same 13 adjacent jurisdictions under both the current GP and the current GP plus proposed DTS 2040 amendment conditions. With the proposed land use amendment, the percent of deficient lane miles attributable to the City would remain unchanged at all 13 impacted jurisdictions when compared to the current GP. Additionally, San José traffic contribution to Los Altos roadway segments would increase from 17% to 22%. However, the Los Altos roadway segments would not be significantly impacted under the current GP and the current GP plus proposed DTS 2040 amendment conditions since the percentage of deficient lane miles attributable to San José would continue to be less than the 25% threshold. The proposed land use amendment would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Therefore, the proposed DTS 2040 GPA would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Impacts on Transit, Bicycle, and Pedestrian Circulation

The Circulation Element of the Envision San José 2040 GP includes a set of balanced, long-range, multimodal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). In combination with land use goals and policies that focus growth into areas served by transit, these transportation goals and policies are intended to improve multi-model accessibility to employment, housing, shopping, entertainment, schools, and parks and create a city where people are less reliant on driving to meet their daily needs. San José's Transportation Goals, Policies, and Actions aim to:

- Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes.
- Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Included within the GP are a set of Goals and Policies to support a multimodal transportation system that gives priority to the mobility needs of bicyclists, pedestrians, and public transit users while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies TR-2.1 through TR-2.11 provide specific policies to guide improvement to walking and bicycling. Such policies include the provision of continuous bicycle system, constructing sidewalks and crosswalks. Similarly, the Envision San José 2040 GP includes specific policies to maximize use of public transit (TR-3.1 through 3.4). As the Downtown Strategy 2040 develops, the project should ensure that it is consistent with the Envision San José 2040 GP to provide safe, accessible and inter-connected pedestrian and bicycle facilities, and accommodate transit services (i.e., bus dugout) as new roadways are constructed. The impacts to pedestrian, bicycle, and transit facilities *are less-than-significant*.

Table 34
AM 4-Hour Traffic Impacts in Adjacent Jurisdictions (DTS 2040 Amendment)

City	Base Year (2015)			2040 General Plan (Baseline)			2040 General Plan Plus GPA		
	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose	Total Deficient Lane Miles[1]	Total Deficient Lane Miles Attributable to San Jose[2]	% of Deficient Lane Miles Attributable to San Jose
Campbell	0.12	0.12	100%	1.15	1.15	100%	1.15	1.15	100%
Cupertino	1.67	1.19	72%	2.60	2.23	86%	2.60	2.23	86%
Gilroy	0.34	0.34	100%	0.00	0.00	0%	0.00	0.00	0%
Los Altos	0.50	0.00	0%	1.49	0.25	17%	1.14	0.25	22%
Los Altos Hills	0.38	0.13	35%	2.51	1.95	78%	2.51	1.95	78%
Los Gatos	0.22	0.22	100%	1.34	1.34	100%	1.34	1.34	100%
Milpitas	0.39	0.39	100%	5.54	5.54	100%	5.54	5.54	100%
Monte Sereno	0.00	0.00	0%	0.00	0.00	0%	0.00	0.00	0%
Morgan Hill	0.00	0.00	0%	0.24	0.24	100%	0.24	0.24	100%
Mountain View	0.39	0.28	71%	1.60	1.48	93%	1.60	1.48	93%
Palo Alto	0.88	0.31	35%	2.42	0.76	31%	2.42	0.76	31%
Santa Clara	0.00	0.00	0%	0.60	0.60	100%	0.34	0.34	100%
Saratoga	0.00	0.00	0%	0.63	0.63	100%	0.63	0.63	100%
Sunnyvale	0.81	0.81	100%	0.53	0.48	90%	0.53	0.48	90%
Caltrans Facilities	5,743.69	4,433.43	77%	5,856.67	4,783.14	82%	5,795.79	4,775.33	82%
Santa Clara County Expressways	0.62	0.51	81%	5.97	5.95	100%	5.61	5.59	100%

Notes:
2040 General Plan (Baseline) = Buildout conditions of the adopted Envision San Jose 2040 General Plan (GP).
GPA = Downtown Strategy 2040 General Plan Amendment
1. Total deficient lane miles are total lane miles of street segments with V/C ratios of 1.0 or greater.
2. A deficient roadway segment is attributed to San Jose when trips from the City are 10% or more on the deficient segment.
Outlined indicates significant impacts.
Source: City of San Jose Travel Forecasting Model runs completed July 2018 by Hexagon Transportation Consultants, Inc.

10. Conclusions

This report presents the results of the long-range traffic impact analysis for the proposed City of San José 2018 General Plan Amendments (project). The project consists of amending the current adopted land use designations of the Envision San José 2040 GP for nine sites within the City of San José and the land use amendments associated with the proposed Downtown Strategy 2040. In addition to the proposed General Plan land use amendments at the nine sites, City Staff recommended alternatives at two of the nine sites were also evaluated, which consisted of alternative land use amendments identified by City of San José Staff rather than those proposed by the applicants. The purpose of the GPAs traffic analysis is to assess the long-range impacts of the amendments on the citywide transportation system. The analysis includes evaluation of increased vehicle miles traveled, increased traffic volume on specified roadway segments, impacts to travel speeds on transit priority corridors, impacts to pedestrian, bicycle, and transit facilities, and impacts to roadways in adjacent jurisdictions. Impacts were evaluated based on the same measures of effectiveness (MOEs) and significance criteria utilized in the Envision San José 2040 GPA TIA.

Per GPA traffic analysis guidelines, described in the City of San José Transportation Analysis Handbook, Volume II (dated April 2018), under the *Methodology for Transportation Network Modeling & Analysis* section, a proposed land use amendment that would result in a net increase of more than 250-peak-hour trips due to increased households or employment is required to prepare a site-specific GPA traffic analysis, with the exception of GPA sites located within the identified North San José, Evergreen, and South San José subareas. The applicant proposed land use amendments on three of the nine amendment sites, in addition to the Staff Alternative land use amendments at both of the GP sites with staff proposed amendments, would result in a net increase of more than 250 peak-hour trips. The Downtown Strategy 2040 also would result in a net increase of more than 250-peak-hour trips.

This study includes an evaluation of the cumulative impacts of all nine GPA sites and DTS 2040 area, for both the applicant proposed and Staff Alternative land use amendments. The study also includes the required site-specific GPA traffic analysis for a total of four GPA sites and the Downtown Strategy 2040. Individual development projects also will be required to complete a near term traffic analysis in conjunction with any future development permit applications consistent with the Envision San José 2040 GP once a development application is submitted to the City.

Cumulative GPA Long-Range Traffic Impacts

Vehicle Miles Traveled Per Service Population

Compared to the current GP, the proposed land use adjustments would not result in an increase in citywide VMT per service population. Therefore, cumulatively, the 2018 GPAs, both applicant proposed

and Staff Alternative, would result in a less than significant impact on citywide daily VMT per service population. It is important to note that the VMT per service population is based on raw model output and does not reflect the implementation of adopted GP policies and goals that would further reduce VMT by increased use of non-auto modes of travel.

Journey-to-Work Mode Share

The proposed land use adjustments will not result in an increase of drive alone trips when compared to the current GP conditions. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on citywide journey-to-work mode share.

Average Vehicle Speeds in Transit Priority Corridors

The proposed land use adjustments will not result in a decrease in travel speeds of greater than one mph or 25 percent on any of the 14 transit priority corridors when compared to current GP conditions. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on the AM peak-hour average vehicle speeds on the transit priority corridors.

Adjacent Jurisdictions

The proposed land use amendments would not result in further impacts on roadways in adjacent jurisdictions than those identified for the current GP. Therefore, cumulatively, the 2018 GPAs, both applicant proposed and Staff Alternative, would result in a *less than significant* impact on the roadway segments in adjacent jurisdictions.

Site-Specific GPA Traffic Analysis

The proposed land use amendments on four of the of seven amendment sites located outside of the specific subareas would result in a net increase of more than 250 peak-hour trips (See Table 3) and require a site-specific GPA traffic analysis. Additionally, the Staff Alternative would result in a net increase of more than 250 peak-hour trips at both of the GP sites with staff proposed amendments. The DTS 2040 amendment proposes to reallocate a substantial number of households and employment from other areas in the City to the Downtown area and would result in an increase of more than 250 peak-hour trips in the Downtown area. Therefore, the DTS 2040 amendment also will be required to prepare a site-specific GPA traffic analysis. The following GPA sites require a site-specific GPA traffic analysis:

- GP17-016 (Berryessa Road)
- GP18-002 (Meridian Avenue)
- GP18-002 (Meridian Avenue) – Staff Alternative
- GP 18-004 (Union Avenue) – Staff Alternative
- GP18-005 (Lelong Street)
- Downtown Strategy 2040 area

The proposed land use amendments on the remaining two GPA sites, located within the Evergreen sub-area, would result in net increase in peak hour trips of less than the established trip threshold and do not require a site-specific GPA traffic analysis.

The results of the analysis show that the additional traffic generated by the each of the four individual GPA sites, and Downtown Strategy 2040 area, that required site-specific analysis would not cause any additional transportation impacts beyond those identified for the Current 2040 GP. Therefore, each of the individual GPA sites and the Downtown Strategy 2040 area would result in a *less than significant* impact on the citywide roadway system.

Impacts on Transit, Bicycle, and Pedestrian Circulation

Transit Services or Facilities

The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would have an adverse effect on existing or planned transit facilities. Therefore, the proposed 2018 GPAs land use adjustments would not substantially disrupt existing, or interfere with planned transit services or facilities.

Bicycle Facilities

The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned bicycle facilities. Therefore, the proposed 2018 GPAs land use adjustments would not substantially disrupt existing, or interfere with planned bicycle facilities; conflict or create inconsistencies with adopted bicycle plans, guidelines, policies, or standards; and provide insecure and unsafe bicycle parking in adequate proportion to anticipated demand.

Pedestrian Facilities

The proposed GPAs land use adjustments would not result in a change to the existing and planned roadway network that would affect existing or planned pedestrian facilities. Therefore, the proposed 2018 GPAs land use adjustments would not substantially disrupt existing, or interfere with planned pedestrian facilities; create inconsistencies with adopted pedestrian plans, guidelines, policies, or standards; and provide accessible pedestrian facilities that would not meet current ADA best practices.

Consistency with General Plan Polices

The City of San José's Transportation Policies contained in the General Plan are intended to do the following:

1. Establish circulation policies that increase bicycle, pedestrian, and transit travel, while reducing motor vehicle trips, to increase the City's share of travel by alternative transportation modes; and
2. Promote San José as a walking- and bicycling-first city by providing and prioritizing funding for projects that enhance and improve bicycle and pedestrian facilities.

Implementation of the General Plan Transportation Policies can help to promote a multi-modal transportation system and stimulate the use of transit, bicycle, and walk as practical modes of transportation in the City, which ultimately will improve operating speeds in the City's 14 transit priority corridors. An enhanced multi-modal transportation system can reduce reliance on the automobile and decreasing the amount of vehicle travel, specifically journey-to-work drive alone trips.

Based on the result of the analysis, the 2018 GPAs are consistent with the City of San José GP transportation policies, as they are projected to increase transit travel, while slightly reducing motor vehicle (drive alone) trips and slightly improving operating speeds along some of the City's 14 transit priority corridors, when compared to the current GP conditions.